TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TENN.	YEAR	SHEET NO.
	2014	U1-1
FED. AID PROJ. NO.	STP-46(21)	
STATE PROJ. NO.	22004-3246-14	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DICKSON COUNTY

STATE ROUTE 46 INTERSECTION IMPROVEMENTS
FROM I-40 TO SR-1 (US-70, HENSLEE DRIVE),
INCLUDING THE INTERSECTION OF SR-1 AT
SR-1 (EAST COLLEGE STREET)

STATE HIGHWAY NO. 46 F.A.H.S. NO. NA

Index Of Sheets

SHEET NAME	SHEET NUMBER
UTILITIES INDEX, UTILITIES OWNERS, AND UTILITY SHEETS	U1-1 THRU U1-13
GAS RELOCATION SHEETS GREATER DICKSON GAS AUTHORITY	U2-1 THRU U2-17
ELECTRIC RELOCATION SHEETS DICKSON ELECTRIC SYSTEM	U3-1 THRU U3-17
WATER RELOCATION SHEETS WATER AUTHORITY OF DICKSON COUNTY	U4-1 THRU U4-17
SEWER RELOCATION SHEETS WATER AUTHORITY OF DICKSON COUNTY	U5-1 THRU U5-11
TELEPHONE RELOCATION SHEETS AT&T	U6-1 THRU U6-15

STANDARD LEGEND

EXISTING UTILITES

POWER — P
TELEPHONE — T
WATER — W
CABLE TV — C
SANITARY SEWER — SA
UNDERGROUND TELEPHONE — T (UG)
GAS — G
FORCE MAIN SEWER — FMS
UNDERGROUND POWER — P (UG)
UNDERGROUND FIBER OPTIC — F (UG)

PROPOSED UTILITIES

POWER — P
UNDERGROUND POWER — P (UG)
TELEPHONE — T
WATER — W
CABLE TV — C
UNDERGROUND TELEPHONE — T (UG)
GAS — G
FORCE MAIN SEWER — FMS
SANITARY SEWER — 8" SA
UNDERGROUND FIBER OPTIC — F (UG)
ENCASEMENT PIPE

POWER POLE
TELEPHONE POLE
POWER/TELEPHONE POLE
MANHOLE
WATER METER W.M.
WATER VALVE W.V.
LIGHT POLE
POWER POLE P
TELEPHONE POLE T
TELEPHONE MANHOLE
WATER METER W.M.
WATER VALVE W.V.
FIRE HYDRANT
SANITARY SEWER MANHOLE
GAS VALVE G.V.

R REMOVE A ABANDON

UTILITY OWNERS AND CONTACTS:

ELECTRIC:	TELEPHONE:	GAS:
DICKSON ELECTRIC SYSTEM **236 COWAN RD.** **DICKSON, TN 37056** **MIKE BILLINGSBY** **PHONE: (615) 441-6301** **EMAIL: MBillingsby@dicksonelectric.com**	**AT&T** **116 S. CANON AVE.** **MURFREESBORO, TN 37129** **KENNETH KORNEGAY** **PHONE: (615) 848-2082** **EMAIL: Kk4096@att.com**	**GREATER DICKSON GAS AUTHORITY** **600 EAST WALNUT STREET** **DICKSON, TN 37055** **ROBERT DURHAM** **PHONE: (615) 441-2830** **EMAIL: RDURHAM@GD.COM**
WATER/SEWER:	CABLE:	FIBER OPTIC:
WATER AUTHORITY OF DICKSON COUNTY **101 COWAN STREET** **DICKSON, TN 37055** **MICHAEL ADAMS** **PHONE: (615) 441-4188** **EMAIL: madams@wadc.us**	**COMCAST / XFINITY** **2501 MCGAVOCK PIKE** **NASHVILLE, TN 37214** **LARRY WINBURN** **PHONE: (615) 244-7462 EXT. 1115140** **EMAIL: LARRY_WINBURN@CABLE.COMCAST.COM**	**SPRINT COMMUNICATION** **411 HUGER STREET** **COLUMBIA, SC 29201** **STEVE R. THOMPSON** **PHONE: (404) 649-2355** **EMAIL: Steve.R.Thompson@sprint.com**

SPECIAL NOTES

SOME UTILITIES CAN BE LOCATED BY CALLING THE
TENNESSEE ONE CALL SYSTEM, INC.
AT 1-800-351-1111

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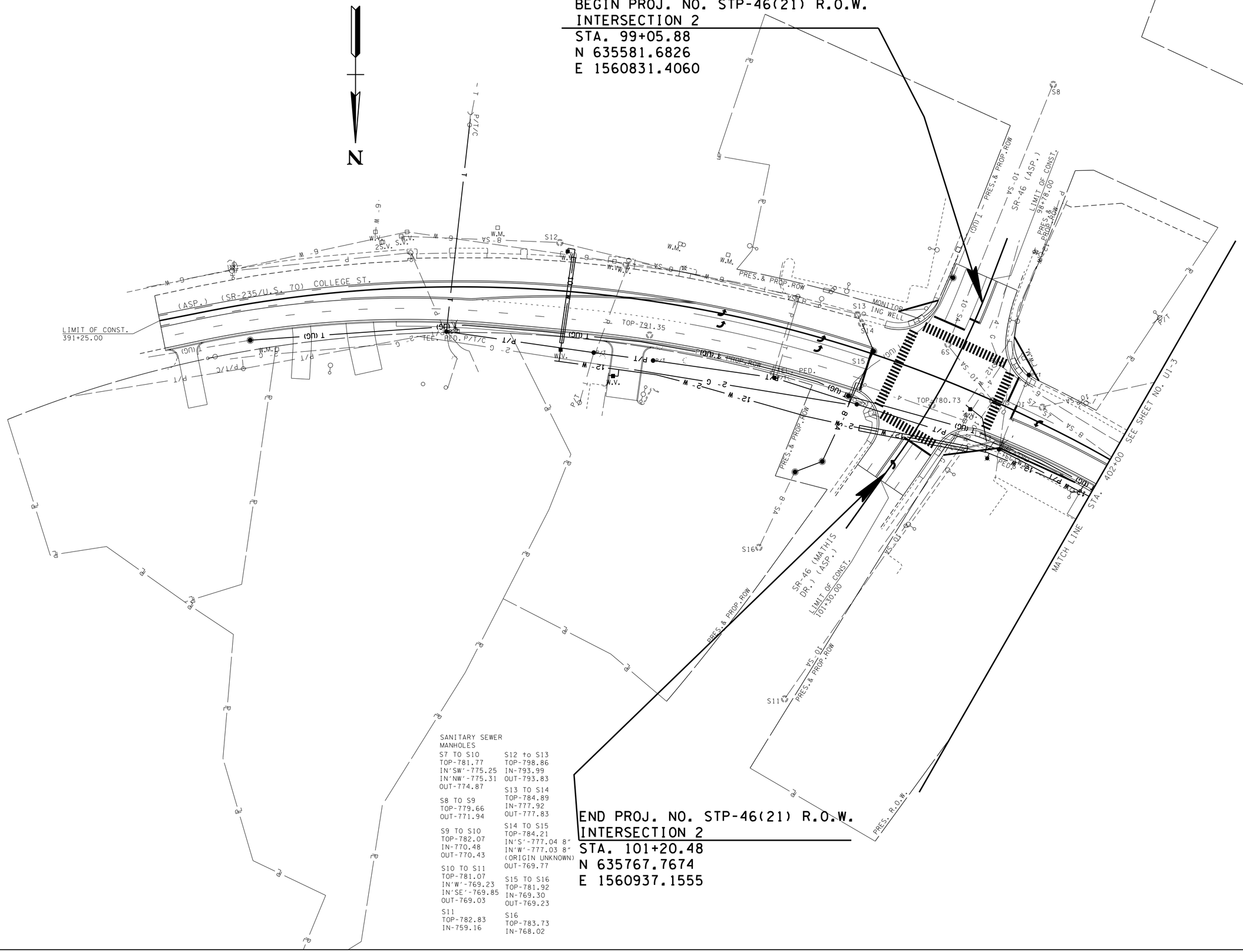
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-2

BEGIN PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 2
STA. 99+05.88
N 635581.6826
E 1560831.4060



SANITARY SEWER MANHOLES

S7 TO S10
TOP-781.77
IN'SW'-775.25
IN'NW'-775.31
OUT-774.87

S8 TO S9
TOP-779.66
OUT-771.94

S9 TO S10
TOP-782.07
IN-770.48
OUT-770.43

S10 TO S11
TOP-781.07
IN'W'-769.23
IN'SE'-769.85
OUT-769.03

S11
TOP-782.83
IN-759.16

S12 to S13
TOP-798.86
IN-793.99
OUT-793.83

S13 TO S14
TOP-784.89
IN-777.92
OUT-777.83

S14 TO S15
TOP-784.21
IN'S'-777.04 8"
IN'W'-777.03 8"
(ORIGIN UNKNOWN)
OUT-769.77

S15 TO S16
TOP-781.92
IN-769.30
OUT-769.23

S16
TOP-783.73
IN-768.02

END PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 2
STA. 101+20.48
N 635767.7674
E 1560937.1555

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO. 2
STA.391+25 TO STA.402+00

SCALE: 1"= 50'

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SANITARY SEWER MANHOLES

S1 TO S2
TOP-810.81
OUT-804.75

S2 TO S3
TOP-807.79
IN-803.48
OUT-803.48

S3 TO S5
TOP-807.47
IN'NW'-802.02
IN'NE'-802.06
OUT-801.99

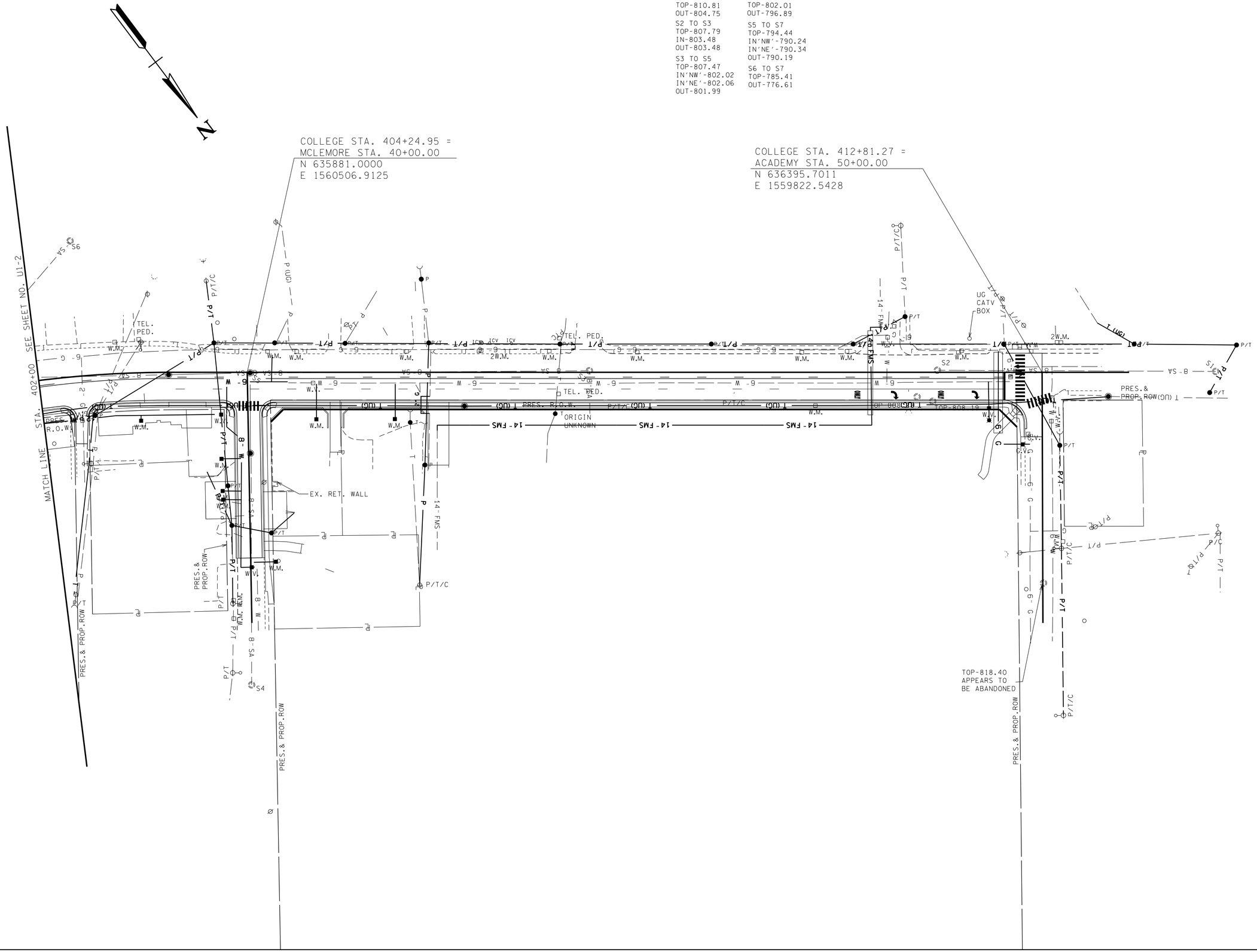
S4 TO S5
TOP-802.01
OUT-796.89

S5 TO S7
TOP-794.44
IN'NW'-790.24
IN'NE'-790.34
OUT-790.19

S6 TO S7
TOP-785.41
OUT-776.61

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-3

REV. 8-18-14: REVISED BUS. ENT. AT STA. 402+83.83 AND STA. 403+63.53.



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO. 2
STA.402+00 TO STA.413+00

SCALE: 1"= 50'

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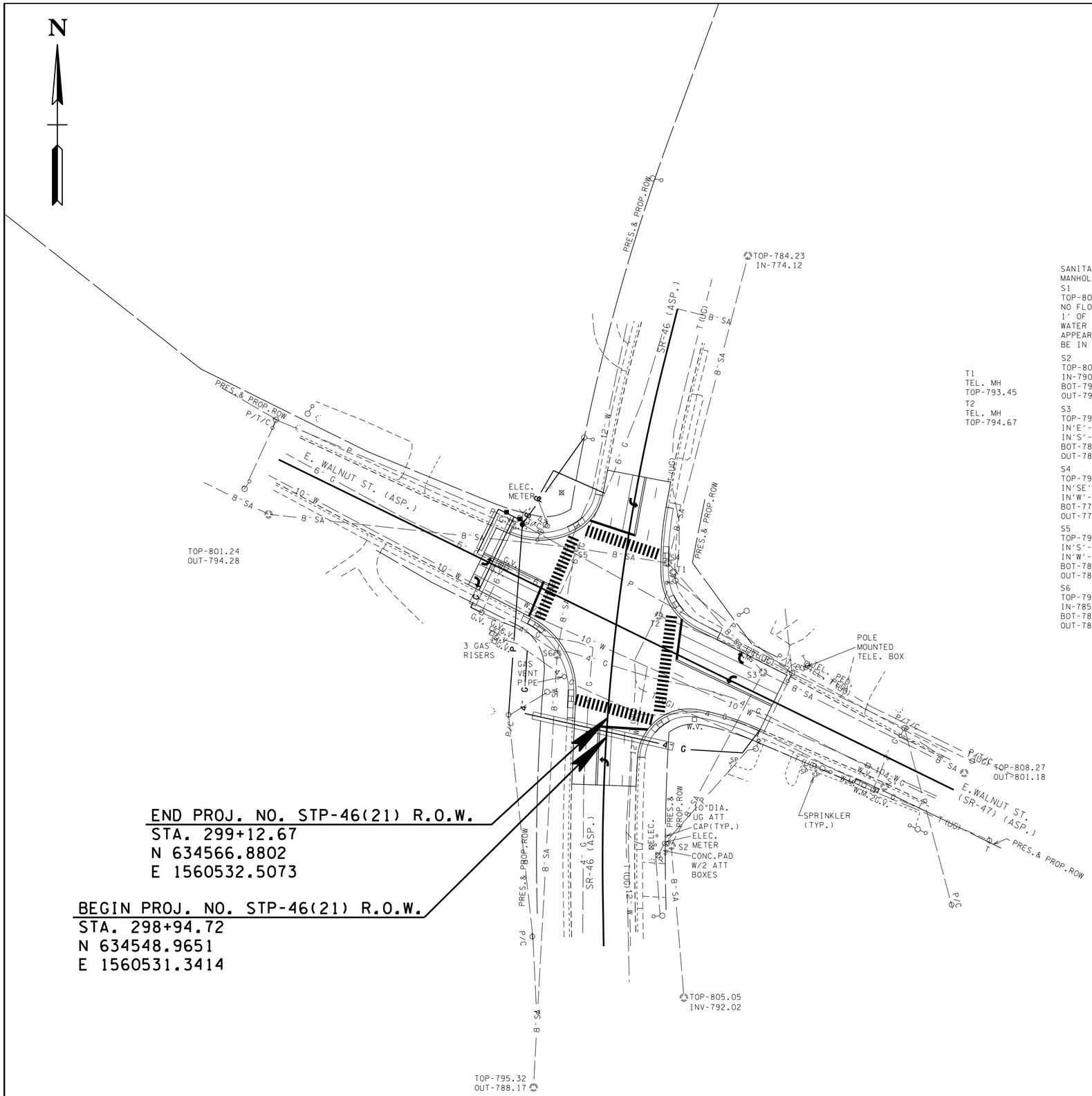
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-4



END PROJ. NO. STP-46(21) R.O.W.
STA. 299+12.67
N 634566.8802
E 1560532.5073

BEGIN PROJ. NO. STP-46(21) R.O.W.
STA. 298+94.72
N 634548.9651
E 1560531.3414

T1
TEL. MH
TOP-793.45

T2
TEL. MH
TOP-794.67

SANITARY SEWER MANHOLES

S1
TOP-805.48
NO FLOW. ABOUT 1' OF STANDING WATER W/DEBRIS. APPEARS TO NOT BE IN USE.

S2
TOP-801.01
IN-790.57
BOT-790.57
OUT-790.57

S3
TOP-797.07
IN'E'-789.09
IN'S'-789.48
BOT-788.97
OUT-788.85

S4
TOP-793.63
IN'SE'-779.19
IN'W'-779.14
BOT-779.12
OUT-779.10

S5
TOP-793.60
IN'S'-783.66
IN'W'-783.59
BOT-783.40
OUT-783.20

S6
TOP-796.20
IN-785.60
BOT-785.50
OUT-785.40

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.3

SCALE: 1"= 50'

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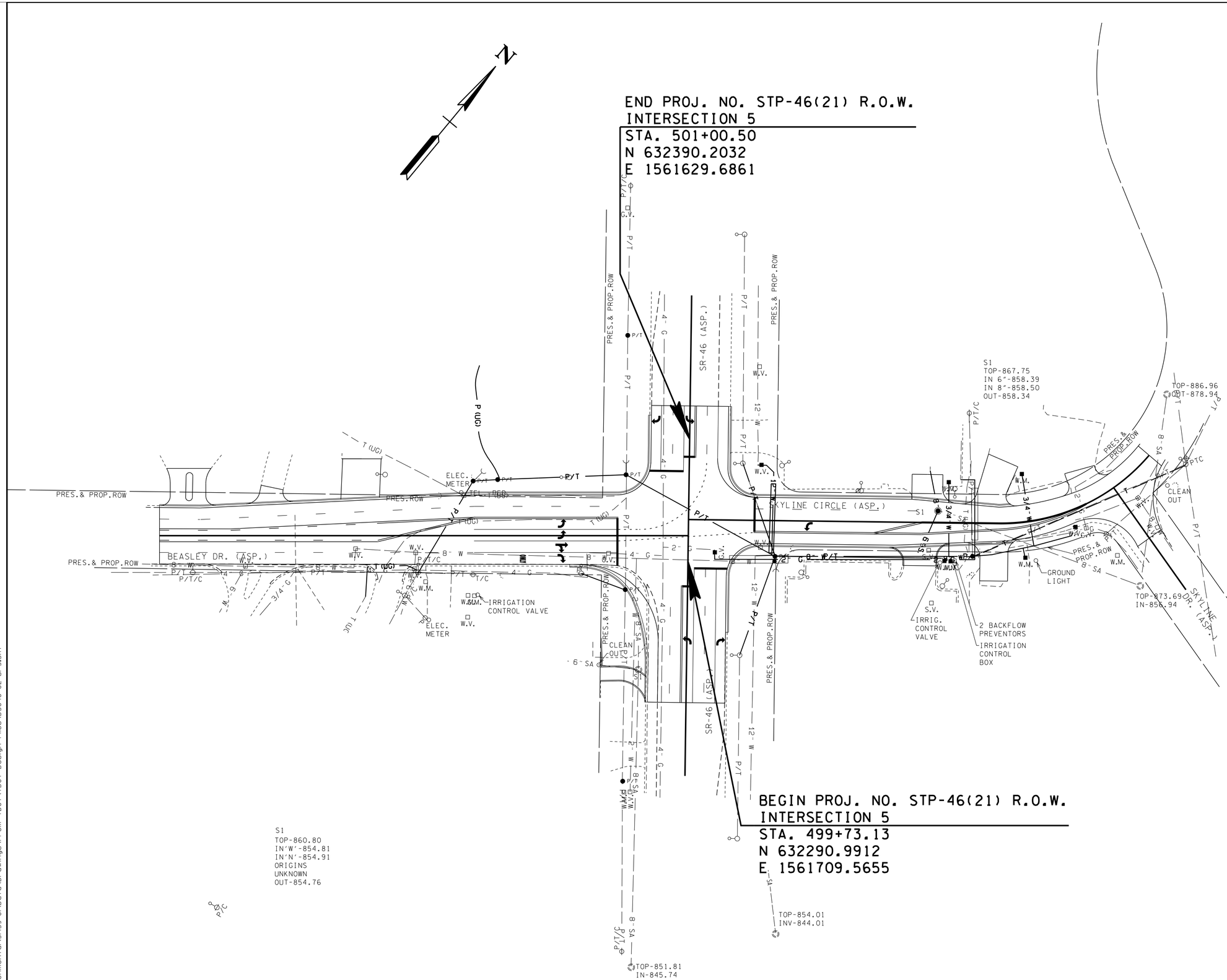
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-5



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.5

SCALE: 1"= 50'

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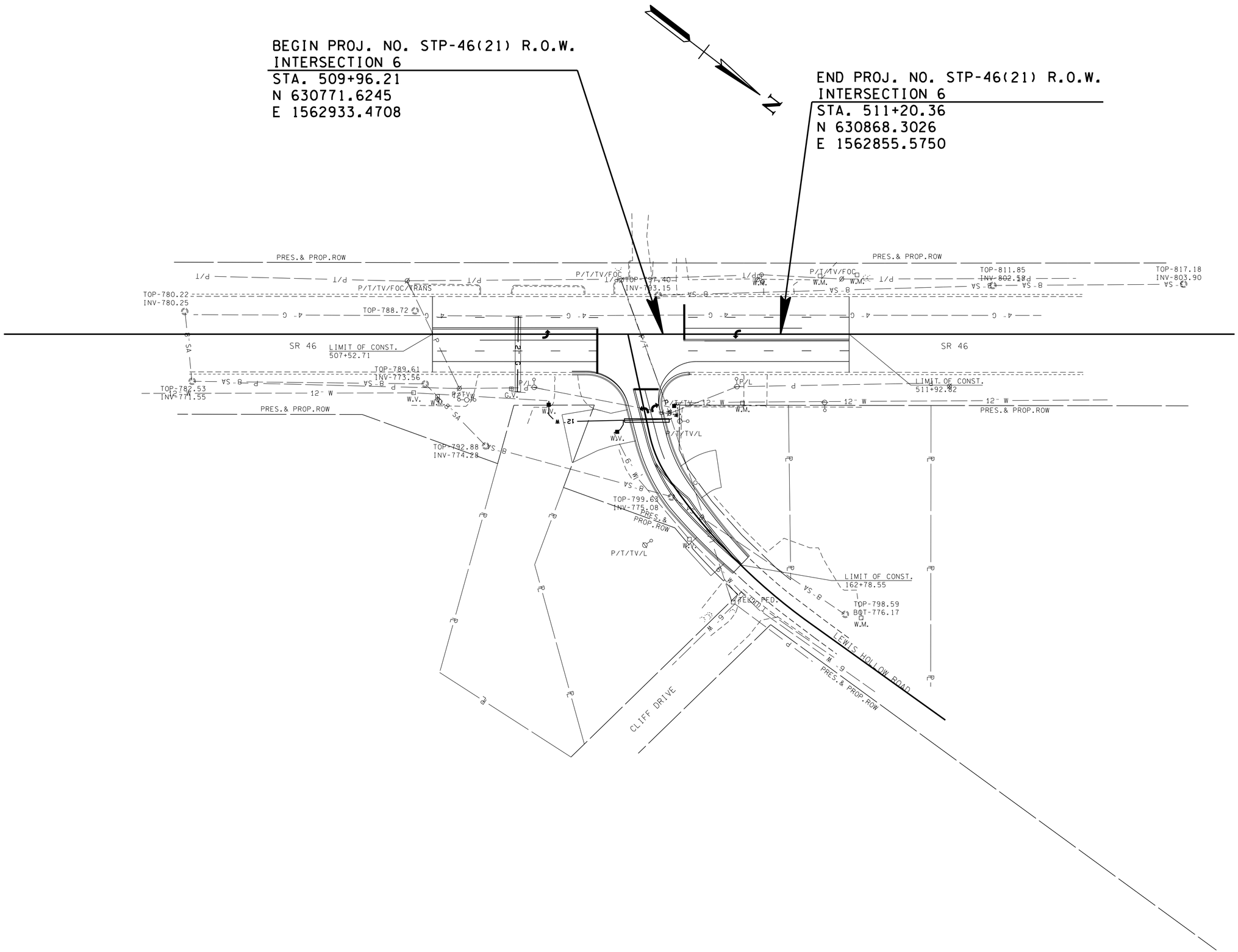
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-6

BEGIN PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 6
STA. 509+96.21
N 630771.6245
E 1562933.4708

END PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 6
STA. 511+20.36
N 630868.3026
E 1562855.5750



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.6

SCALE: 1"= 50'

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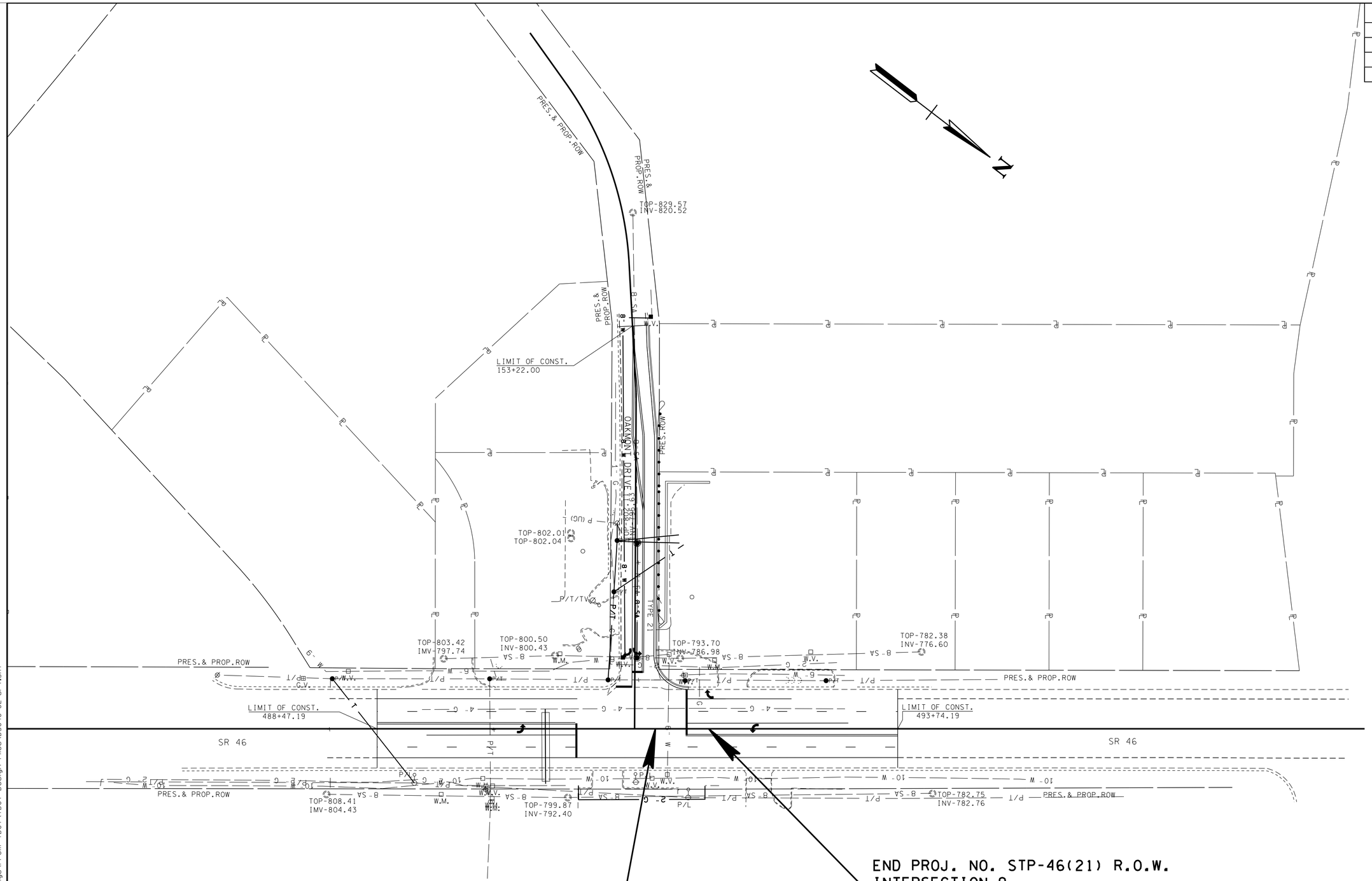
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-7



END PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 9
STA. 491+82.92
N 629359.6298
E 1564071.1473

BEGIN PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 9
STA. 491+28.90
N 629317.5654
E 1564105.0395

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.9

SCALE: 1"= 50'

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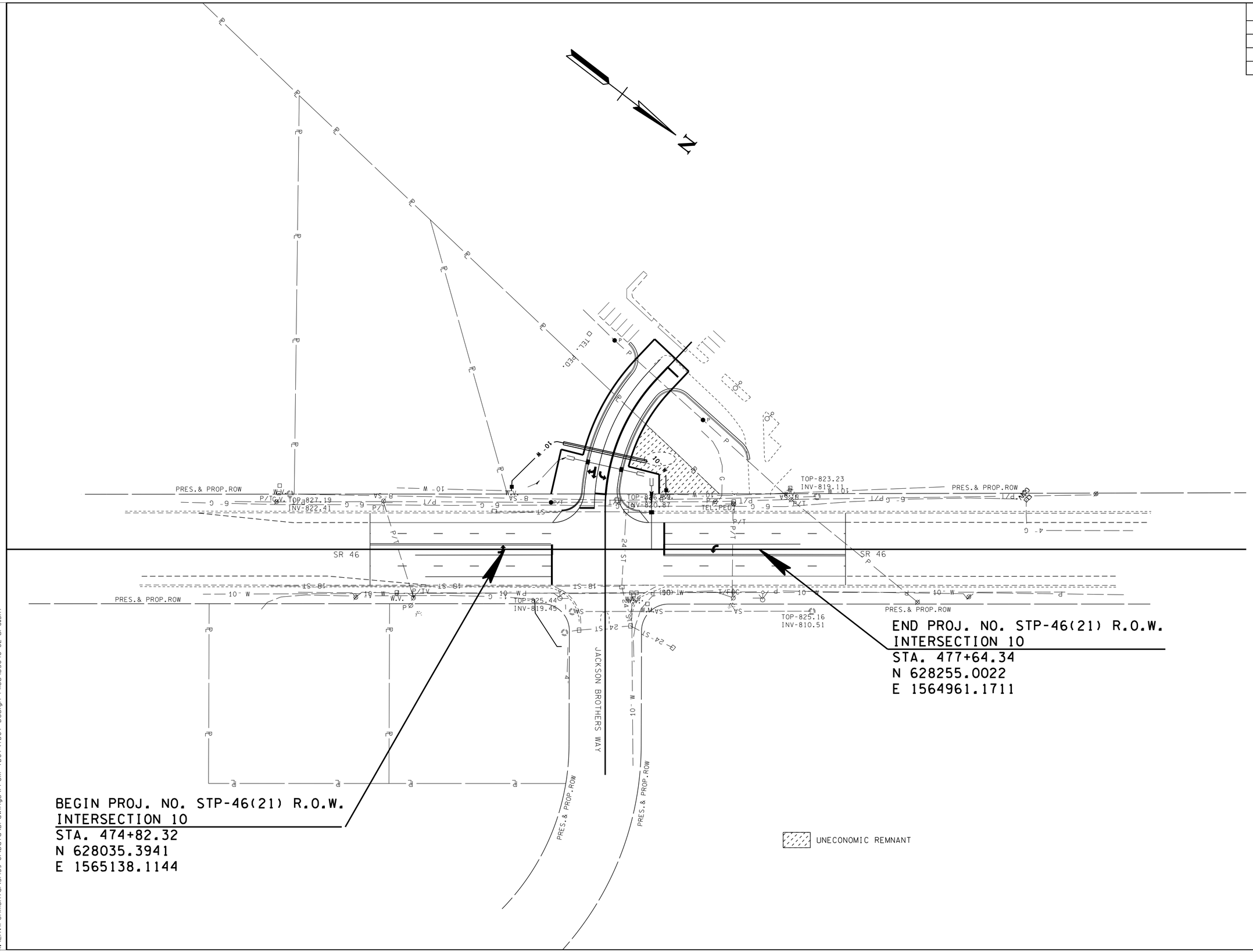
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-8



SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.10

SCALE: 1"= 50'

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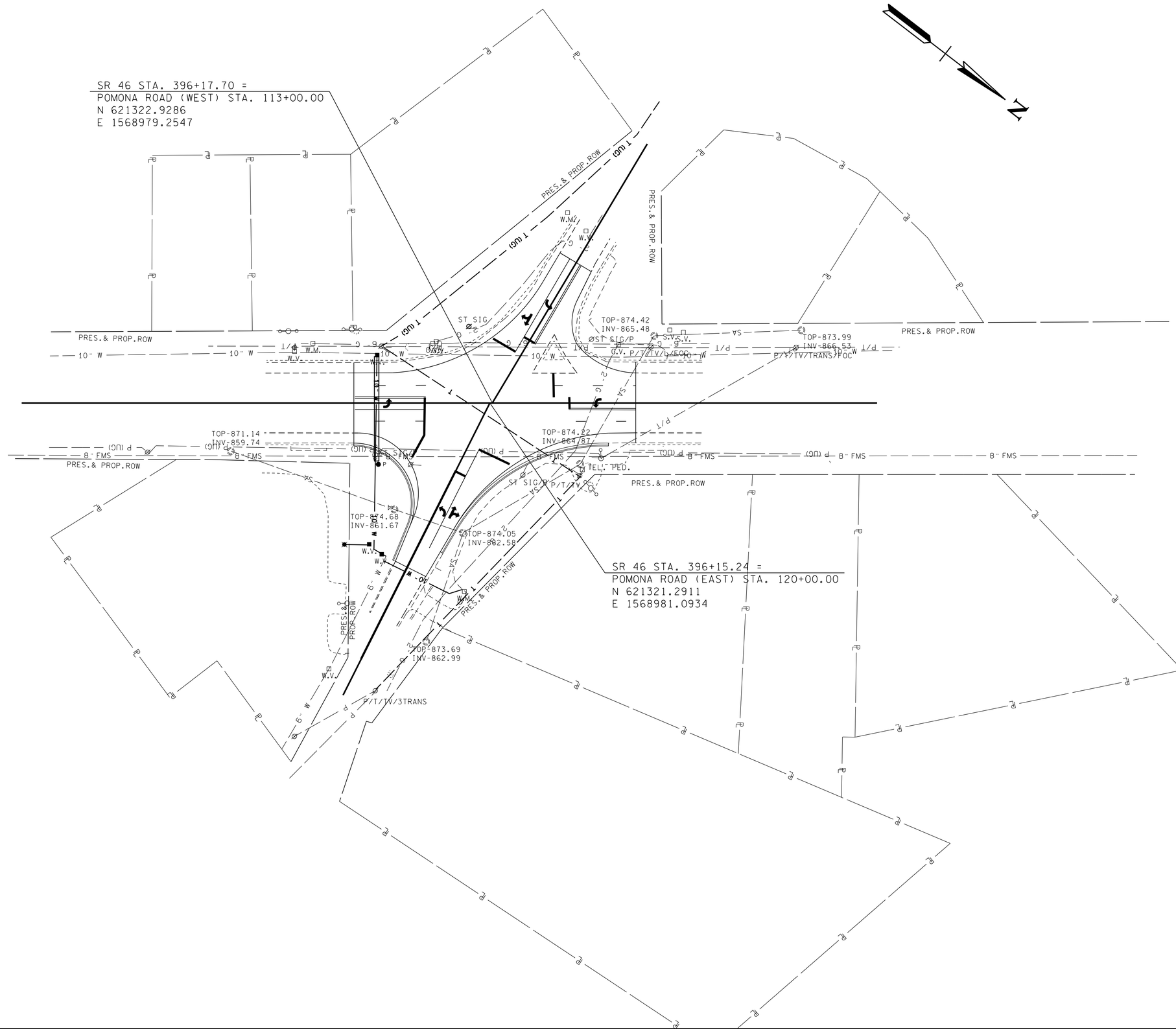
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-9



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.11

SCALE: 1"= 50'

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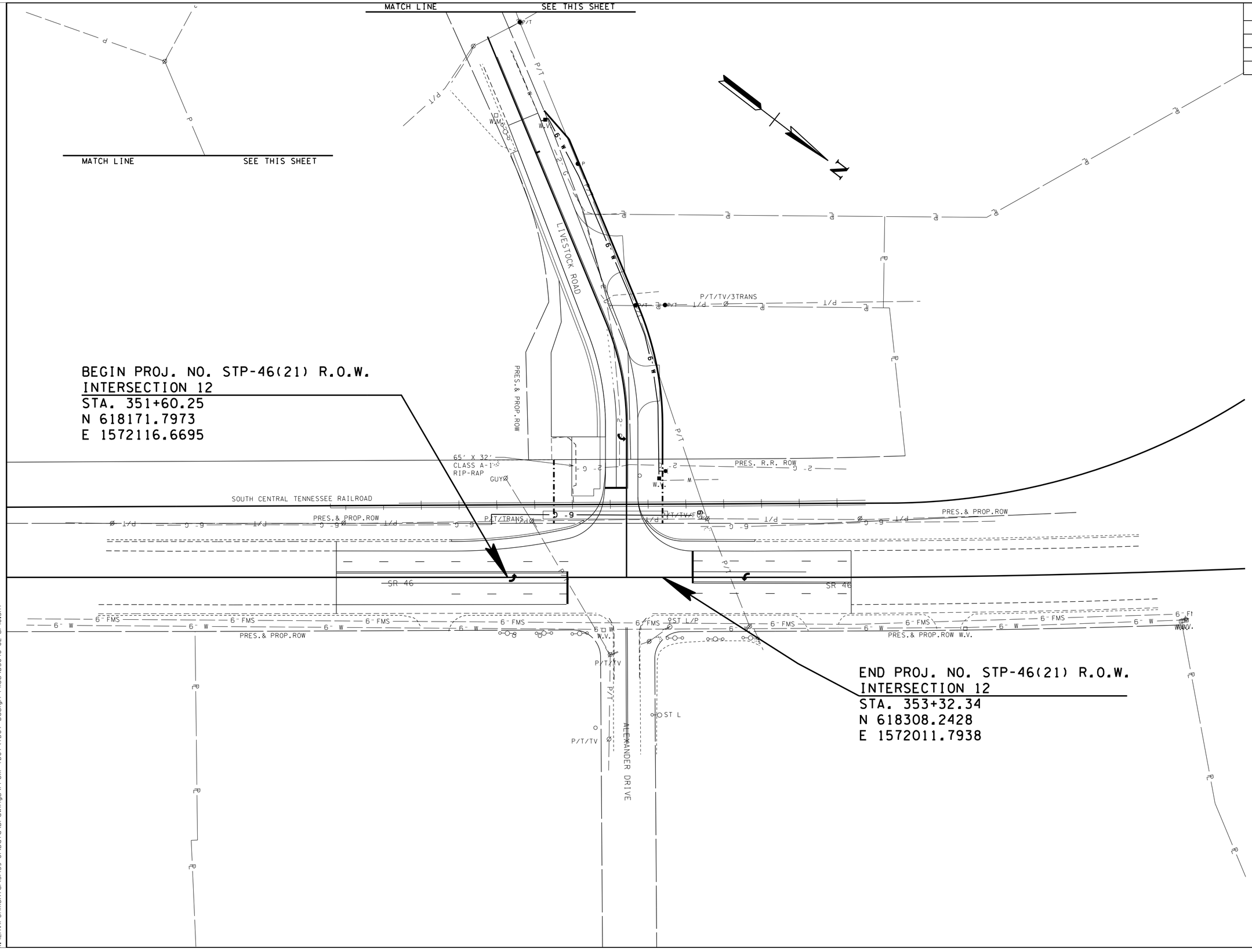
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-10



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.12

SCALE: 1"= 50'

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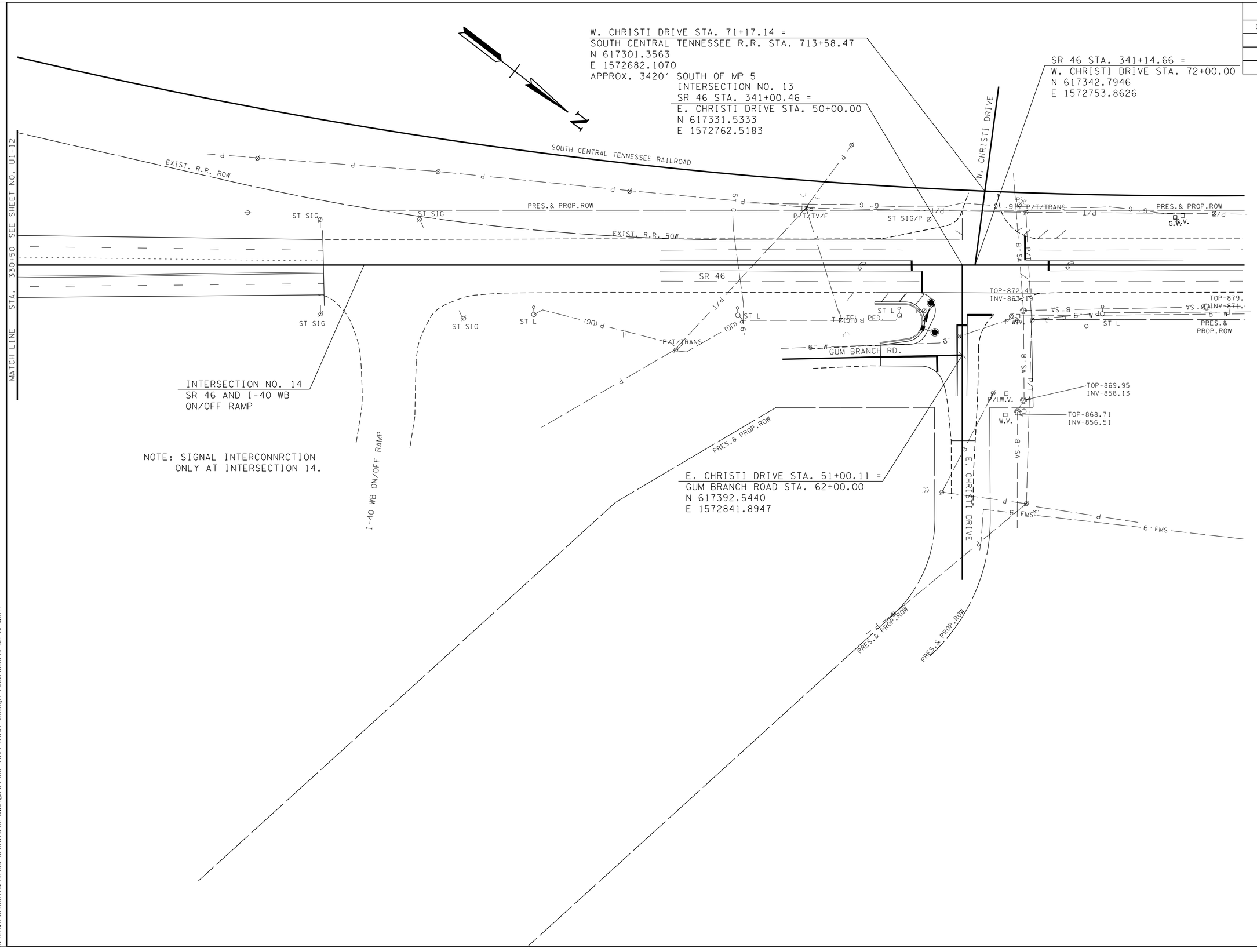
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-11



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.13 & 14

SCALE: 1"= 50'

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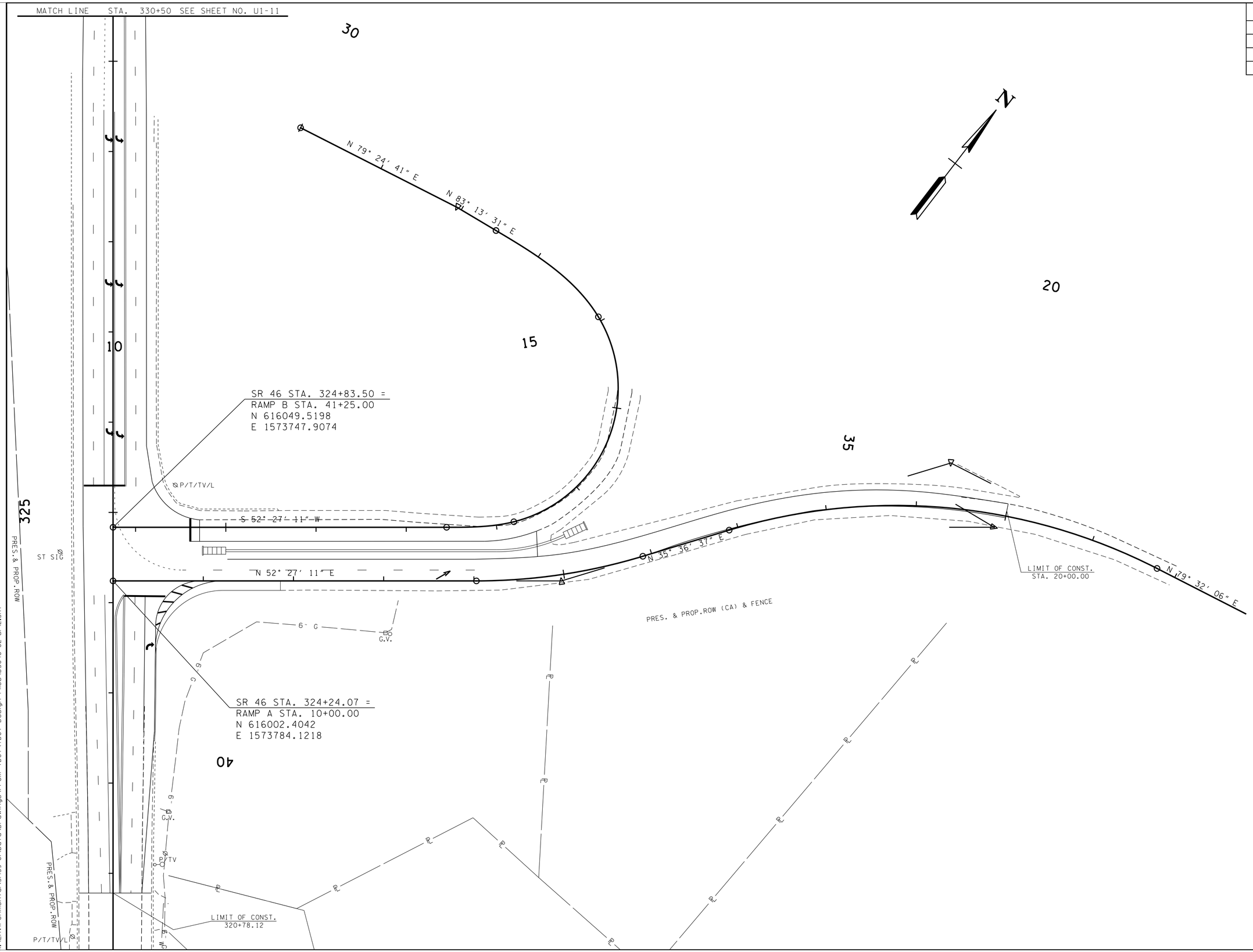
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2014	STP-46(21)	U1-12



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO. 15

SCALE: 1"= 50'

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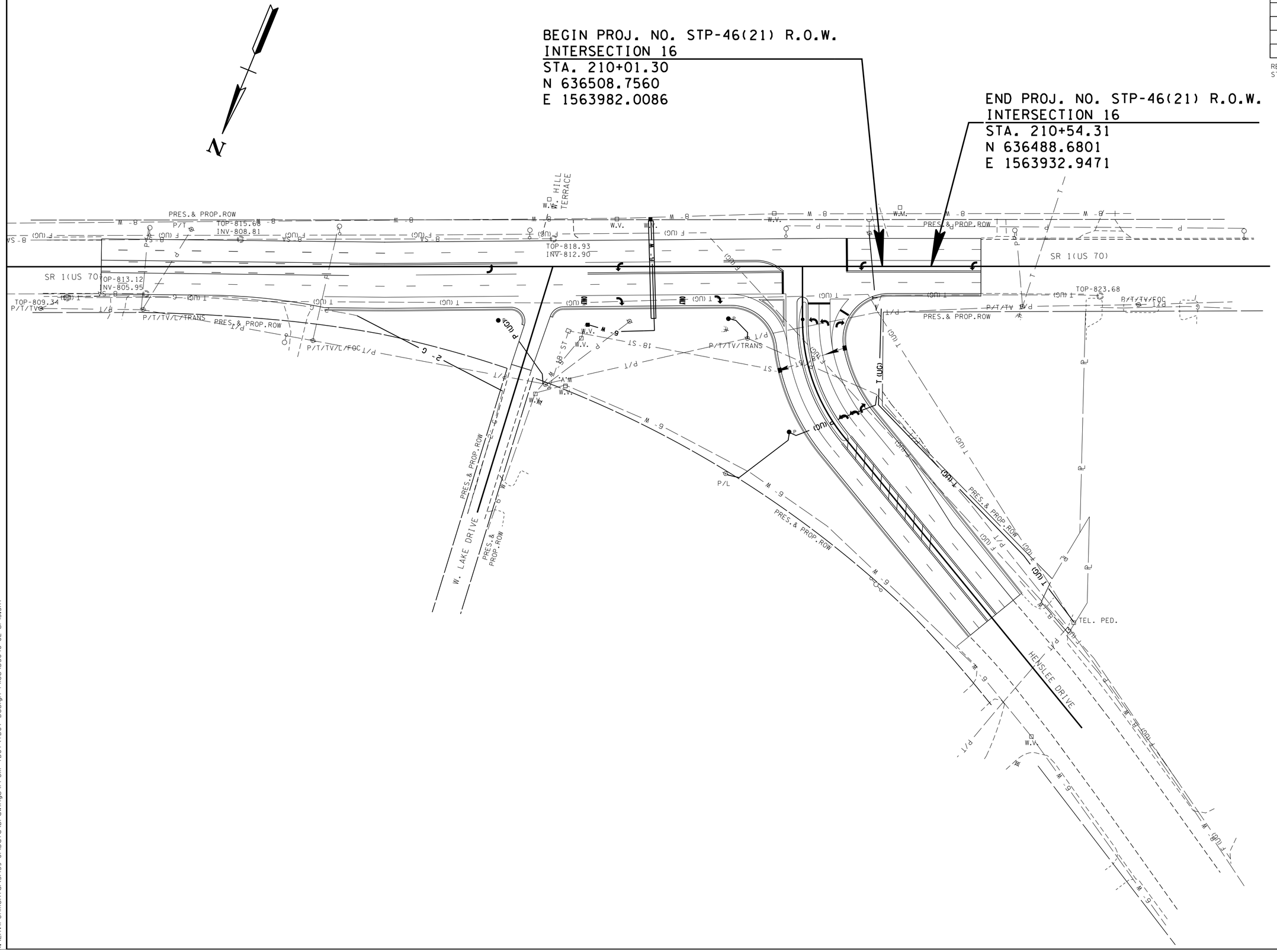
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-46(21)	U1-13

REV. 8-01-14: ADDED 40' LOWERED CURB LT.
STA. 183+25.00.

BEGIN PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 16
STA. 210+01.30
N 636508.7560
E 1563982.0086

END PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 16
STA. 210+54.31
N 636488.6801
E 1563932.9471



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY LAYOUT

INTERSECTION NO.16

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-1

DICKSON COUNTY

REV. 10-31-14: REVISED QUANTITY FOR 791-01.02, 791-01.04, 791-01.05, 791-04.20, 791-06.31, 791-06.32, AND 791-10.05

ESTIMATED QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
(1)	791-01.02	2IN STEEL GAS MAIN	L.F.	1,050
(1)	791-01.04	4IN STEEL GAS MAIN	L.F.	170
(1)	791-01.05	6IN STEEL GAS MAIN	L.F.	390
(1)	791-03.02	2IN HDPE GAS MAIN	L.F.	225
(2)	791-04.01	HDD <2IN PE PIPE - UNCONSOLIDATED	L.F.	60
(2)	791-04.20	HDD 2IN STEEL PIPE - UNCONSOLIDATED	L.F.	230
(2)	791-04.23	HDD 6IN STEEL PIPE - UNCONSOLIDATED	L.F.	380
(2)	791-05.01	BORE/JACK 4IN - STEEL CASING PIPE - UNCON.	L.F.	140
	791-06.02	CONNECT TO 2IN EX. PE MAIN	EACH	1
	791-06.09	CONNECT TO 1IN EX. PE MAIN	EACH	2
	791-06.31	CONNECT TO 2IN EX. STL MAIN W/STOPPLE	EACH	12
	791-06.32	CONNECT TO 4IN EX. STL MAIN W/STOPPLE	EACH	4
	791-06.33	CONNECT TO 6IN EX. STL MAIN W/STOPPLE	EACH	7
(3)	791-07.09	2IN STEEL GAS VALVE ASSEMBLY	EACH	2
(3)	791-07.11	6IN STEEL GAS VALVE ASSEMBLY	EACH	3
(1)	791-08.08	1IN PE SERVICE PIPE	L.F.	100
(1)	791-08.09	1-1/4IN PE SERVICE PIPE	L.F.	90
(4)	791-10.02	RETIRE IN PLACE 1IN SERV CUT & PLUG	EACH	1
(4)	791-10.04	RETIRE IN PLACE 2IN SERV CUT & PLUG	EACH	12
(4)	791-10.05	RETIRE IN PLACE 4IN SERV CUT & PLUG	EACH	5
(4)	791-10.06	RETIRE IN PLACE 6IN SERV CUT & PLUG	EACH	8

FOOTNOTES

(1) INCLUDES ALL MATERIALS INCLUDING SAND/STONE BEDDING, FLOWABLE FILL, TEMPORARY PLACEMENT IN OR OUT OF R.O.W., LABOR, EQUIPMENT FOR COMPLETE INSTALLATION OF PIPE INCLUDING BUT NOT LIMITED TO TRAFFIC CONTROL, EXCAVATION INCLUDING DIRT/ROCK, BACKFILLING, CREEK CROSSINGS PER SWPPP, COUPLINGS, FITTINGS, PIPE FUSION, APPURTENANCES, MAINTAINING THE TRENCH, PURGE POINT INSTALLATION, TESTING BY UTILITY SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO AIR, NITROGEN, HYDROSTATIC OR X-RAY, DEW POINT OR DRYING, AND ANY OTHER LABOR OR MATERIALS REQUIRED TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS.

(2) INCLUDES ALL MATERIALS, LABOR, EQUIPMENT, AND TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO FLUID CONTAINMENT FOR COMPLETE HORIZONTAL DIRECTION DRILLING INSTALLATION OF CASING PIPE OR UNCASED CARRIER PIPE IN BOTH UNCONSOLIDATED SOIL OR ROCK. STEEL PIPE INCLUDES SPECIAL COATING AS SPECIFIED ON PLANS AND SPECS. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM PRICE. INCLUDES ALL MATERIALS FOR CASING PIPE AND CARRIER PIPE INSTALLATION, INCLUDING INSULATORS, SPACERS, END SEALS AND 2" VENT PIPE.

(3) INCLUDES TRANSITION FITTINGS, VALVES, VALVE BOX, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, COUPLINGS, FUSION TEES, TAP OF EXISTING LINE, AND ALL OTHER NECESSARY MATERIALS AND LABOR FOR COMPLETE INSTALLATION OF ASSEMBLY INCLUDING TRAFFIC CONTROL.

(4) INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR RETIREMENT OF ITEM INCLUDING STABILIZING THE ITEM OF PLANT PER UTILITY SPECIFICATIONS.

Index Of Sheets

SHEET NO.	SHEET DESCRIPTION
U2-1	QUANTITIES AND INDEX
U2-2	GENERAL NOTES
U2-3	UTILITY EASEMENTS
U2-4	UTILITY LAYOUT
U2-5	UTILITY LAYOUT
U2-6	UTILITY LAYOUT
U2-7	UTILITY LAYOUT
U2-8	UTILITY LAYOUT
U2-9	UTILITY LAYOUT
U2-10	UTILITY LAYOUT
U2-11	UTILITY LAYOUT
U2-12	UTILITY LAYOUT
U2-13	UTILITY LAYOUT
U2-14	UTILITY LAYOUT
U2-15	UTILITY LAYOUT
U2-16	CONSTRUCTION DETAILS
U2-17	CROSS SECTIONS

UTILITY INFORMATION

GREATER DICKSON GAS AUTHORITY
605 EAST WALNUT STREET
DICKSON, TN 37055
ROBERT DURHAM, MANAGER
(615) 441-2830
rdurham@gdga.com

LEGEND

PROPOSED	——X" G——
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000030 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

NATURAL GAS RELOCATION

QUANTITIES AND INDEX

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-2

DICKSON COUNTY

REV. 10-31-14: REVISED MAOP TO 100 PSIG, TEST PRESSURE TO 150 PSIG FOR VALVES.

GENERAL NOTES TO CONTRACTOR:

STANDARD UTILITY NOTES:

1. EXCEPT FOR EROSION AND SEDIMENT CONTROL ITEMS, NO ROADWAY OR BRIDGE ITEMS SHALL BE UTILIZED TO COMPENSATE FOR WORK METHODS OR MATERIALS ASSOCIATED WITH AND/OR SPECIFIED FOR THE UTILITY INSTALLATION, EVEN THOUGH THE SAME OR SIMILAR ROADWAY OR BRIDGE MATERIALS MAY HAVE BEEN CALLED FOR IN THE UTILITY SPECIFICATIONS OR DRAWINGS.
2. ALL MATERIALS, METHODS, AND/OR INTEGRAL MATERIALS OUTLINED IN THE UTILITY SPECIFICATIONS OR DRAWINGS NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL INSTALLATION MUST BE INCLUDED IN THE UNIT PRICE FOR THE ASSOCIATED UTILITY WORK ITEM.
3. THE CONTRACTOR MUST MAINTAIN ALL SERVICES DURING THE CONSTRUCTION OF THE RELOCATED FACILITY. ANY COSTS ASSOCIATED WITH INSTALLATION OF REQUIRED TEMPORARY SERVICE LINES DUE TO THE ROADWAY CONSTRUCTION SEQUENCE OF WORK (I.E., CUTS, FILLS, PHASING, ETC.) SHALL BE INCLUDED IN THE COST OF THE PERMANENT UTILITY ITEMS.
4. IT SHALL BE THE RESPONSIBILITY OF THE PRIME CONTRACTOR'S SURVEYOR TO LAY OUT ALL THE FACILITIES BEING RELOCATED WITHIN THE CONTRACT.
5. FOR BURIED UTILITIES, THE PRIME CONTRACTOR OR HIS SUBCONTRACTOR SHALL BE REQUIRED TO PROVIDE TO THE UTILITY UPON COMPLETION OF THE UTILITY'S RELOCATION WORK A SET OF AS-BUILT DRAWINGS FOR THEIR RECORDS. THESE AS-BUILT DRAWINGS SHOULD BE PREPARED AS THE JOB PROGRESSES TO ENSURE THEIR ACCURACY.
6. WHERE EROSION CONTROL MEASURES ARE NEEDED FOR THE UTILITY RELOCATION WORK OCCURRING INSIDE OR OUTSIDE STATE RIGHT-OF-WAY, THE CONTRACTOR SHALL SUBMIT TO THE TDOT PROJECT SUPERVISOR FOR APPROVAL A PROPOSED EROSION AND SEDIMENT CONTROL PLAN PRIOR TO BEGINNING THE WORK. TDOT APPROVAL MUST BE RECEIVED BEFORE THE EROSION CONTROL PAY ITEMS FOR ROADWAY CONSTRUCTION CAN BE USED FOR ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED FOR THE UTILITY RELOCATION WORK.
7. DRIVEWAY, SIDEWALK AND ROADWAY TEMPORARY RESTORATION SHALL BE PART OF THE IN-PLACE COST OF PLACING THE UTILITY ITEM WITHIN THE ROW.
8. ANY EXCAVATION OF THE STREAM CHANNEL AREA SHALL BE SEPARATED FROM FLOWING WATER AND ACCOMPLISHED DURING LOW FLOW CONDITIONS. THIS SHALL BE ACCOMPLISHED BY THE USE OF FLUMES, LINED DIVERSION CHANNEL WITH SANDBAG BERM, DIVERSION PIPE WITH SANDBAG DAM AT PIPE INLET, OR IN SOME CASES COFFERDAMS. ALTERNATIVELY, BASED ON FIELD CONDITIONS AND CONTRACTOR SELECTION, THE UTILITY RELOCATION MAY BE ACCOMPLISHED USING BORE TECHNOLOGY WITH NO STREAM CHANNEL IMPACTS

DAMAGES TO EXISTING UTILITIES:

1. REPAIRS AND/OR REPLACEMENTS TO ANY UTILITIES DAMAGED BY CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL PAYMENT WILL BE ALLOWED.

GENERAL NOTES:

1. CONTRACTOR SHALL GIVE AFFECTED PROPERTY OWNERS TWO WEEKS NOTICE PRIOR TO CUTTING FENCES.
2. ANY DAMAGE TO PROPERTY, INCLUDING FENCES, SHALL BE CORRECTED TO THE SATISFACTION OF THE PROPERTY OWNERS BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILTIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
4. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS. IN THE EVENT OF A CONFLICT BETWEEN THE REGULATIONS, THE MORE STRINGENT SHALL APPLY.
5. THE OWNER OR THE OWNER'S REPRESENTATIVE SHALL BE SOLELY RESPONSIBLE FOR INTERPRETATION OF THE CONSTRUCTION PLANS. IN THE EVENT OF AN AMBIGUITY, THE CONTRACTOR SHALL CONTACT THE OWNER OR THE OWNER'S REPRESENTATIVE FOR CLARIFICATION.
6. PRIOR TO BEGINNING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATIONS OF ANY UNDERGROUND UTILITIES IN THE VICINITY OF THE PROPOSED WORK. ANY CONFLICTS WITH UTILITIES, ABOVE OR UNDERGROUND, SHALL BE RESOLVED WITH THE UTILITY OWNER. ANY CONTRACTOR-CAUSED DAMAGE TO EXISTING OR NEW UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER OR DEVELOPER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN SURVEYS, ESTABLISH LINES AND GRADES AND PERFORM ANY SUCH FIELD SURVEY AS NECESSARY FOR THE COMPLETION OF EACH ITEM OF WORK. THE CONTRACTOR SHALL PROVIDE ONE COPY OF ALL FIELD SURVEY NOTES TO THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.
8. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL PERMITS AND SCHEDULING ALL REVIEWS BY THE LOCAL CODES ENFORCEMENT OFFICER.
9. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF ALL REGULATORY PERMITS FOR THE PROJECT. WHETHER SUCH PERMIT WAS OBTAINED BY THE CONTRACTOR OR THE OWNER. THE CONTRACTOR AND OWNER SHALL ENSURE THAT BOTH PARTIES HAVE COPIES OF ALL REGULATORY PERMITS.
10. THE CONTRACTOR SHALL CLEAR ONLY SUCH AREA AS IS NECESSARY TO CONSTRUCT SPECIFIC ITEMS OF WORK, OR SUCH ADDITIONAL AREAS AS MAY BE PERMITTED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS AND OTHER ORGANIC MATERIALS REMOVED FROM THE CONSTRUCTION AREA. DISPOSAL SHALL BE ACCOMPLISHED ONLY BY LOCALLY APPROVED MEANS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL ADJACENT TO THE CONSTRUCTION SITE. NO INTERRUPTION OF PUBLIC TRAFFIC FLOW WILL BE ACCEPTED. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AND FACILITIES WHEN SUCH ACCESS PREVIOUSLY EXISTED ACROSS THE PROJECT AREA. TRAFFIC CONTROL SHALL CONSIST OF SUCH SIGNS, BARRICADES, BARRIERS, BYPASSES, DETOURS OR OTHER MEASURES ERECTED AND MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT AND COMPLY WITH MUTCD, CURRENT EDITION.
12. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, DIMENSIONS, PLAN ELEVATIONS, INVERTS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK AND IS RESPONSIBLE FOR THE SAME. REMEDIAL WORK RESULTING FROM LACK OF VERFICATION WILL BE AT CONTRACTOR'S SOLE EXPENSE.
13. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE DAMAGE OR LOSS OF ANY REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
14. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.
15. THE CONTRACTOR ACKNOWLEDGES AND AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER AND ENGINEER FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
16. THE CONTRACTOR SHALL PROVIDE SUCH BRACING, SHEETING AND SHORING, BLASTING PROTECTION, WARNING LIGHTS AND BARRICADES, ETC. AS MAY BE NECESSARY FOR THE PROTECTION OF LIFE AND PROPERTY FOR HIS OWN EMPLOYEES AND THE GENERAL PUBLIC. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY STATUTES AND RULES REQUIRING CERTAIN PROTECTIVE PERSONAL APPAREL SUCH AS HARD HATS, EAR PLUGS, EYE SHIELDS, PROTECTIVE SHOES, ETC. THE OWNER AND ENGINEER ASSUME NO RESPONSIBLIITY OR LIABILITY FOR ACTIONS TAKEN BY THE CONTRACTOR WHICH ENDANGER LIFE OR PROPERTY.
17. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
18. EMBANKMENTS SHALL BE CONSTRUCTED SUCH THAT ADEQUATE SURFACE DRAINAGE IS PROVIDED AT ALL TIMES.
19. FILL AREAS SHALL BE COMPACTED BY APPROVED MEANS TO A DENSITY OF NOT LESS THAN 98% OF OPTIMUM DENSITY.
20. FILL MATERIALS SHALL BE PLACED IN LIFTS NO GREATER THAN EIGHT INCHES IN THICKNESS. STONE LARGER THAN 18 INCHES DIAMETER SHALL BE PLACED IN FILL.
21. BLASTING WILL NOT BE ALLOWED IN THIS PROJECT.
22. UNIT PRICES FOR THE PROPOSED GAS LINE SHOULD INCLUDE MATERIALS, LABOR, EQUIPMENT, INSURANCE,OVERHEAD AND PROFIT.SEE PROVIDED MATERIALS LIST, THIS SHEET.
23. NON-PAY ITEMS: ONLY ITEMS SHOWN ON THE BID AS PAY ITEMS WILL BE PAID FOR. COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS FOR THE ENTIRE CONTRACT SHALL BE INCLUDED IN THE PRICE BID FOR PAY ITEMS.
24. NO ITEM QUANTITIES IN BIDDERS PROPOSAL WILL BE ADJUSTED AFTER RECEIPT OF BIDS UNLESS CONCURRED BY OWNER. CONTRACTOR IS ENCOURAGED TO CHECK QUANTITIES IN BIDDERS PROPOSAL PRIOR TO SUBMITTING BID. ANY DISCREPANCIES FOUND BY THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AS SOON AS POSSIBLE AND IN ALL CASES PRIOR TO THE OPENING OF BIDS.
25. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST TEN (10) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY. TENNESSEE ONE CALL SHALL BE CONTACTED TO ASSIST IN UTILITY LOCATION.

FINAL DRESSING, SEEDING AND SODDING:

1. FINAL DRESSING, SEEDING AND/OR SODDING SHALL BE PERFORMED ON ALL DISTURBED AREAS WITH CLOSE CONFORMITY TO THE LINES AND GRADES INDICATED ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE CODES ENFORCEMENT OFFICER. ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT SUBJECT TO PAVING OR OTHER PERMANENT SURFACE TREATMENT, SHALL BE RESTORED BY FINAL DRESSING AND SEEDING OR SODDING AS APPROPRIATE TO THE LANDSCAPE.
2. AREAS OUTSIDE THE CONSTRUCTION LIMITS THAT ARE DISTURBED BY THE CONTRACTOR SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. AFTER DESIGNATED AREAS HAVE BEEN CAREFULLY GRADED, SOIL SHALL BE PREPARED TO RECEIVE FERTILIZER AND SEED OR SOD. FERTILIZER SHALL BE A STANDARD COMMERCIAL FERTILIZER GRADE 15-15-15 APPLIED AT A RATE OF NOT LESS THAN 10 POUNDS PER 1,000 SQUARE FEET. AN ALTERNATE FERTILIZER MAY BE APPROVED BY THE OWNER UPON RECOMMENDATION BY A RECOGNIZED AUTHORITY. THE FERTILIZER SHALL BE LIGHTLY HARROWED, RAKED OR OTHERWISE INCORPORATED INTO THE SOIL TO A DEPTH OF APPROXIMATELY 1/2 INCH.
4. THE SEED SHALL BE AS FOLLOWS:

NAME	% BY WEIGHT
LESPEDEZA	20
SERICEA LESPEDEZA	15
KENTUCKY 31 FESCUE	40
ENGLISH RYE	15
WHITE DUTCH CLOVER	5
WEEPING LOVE GRASS	5
OR	
KENTUCKY 31 FESCUE	55
REDTOP	15
ENGLISH RYE	20
WHITE DUTCH CLOVER	5
WEEPING LOVE GRASS	5

5. THE OWNER RESERVES THE RIGHT TO NAME ANOTHER GRASS SEED MIXTURE APPROPRIATE TO THE NATURE OF THE DEVELOPMENT.
6. SOD WHICH FAILS TO TAKE, OR GRASS WHICH FAILS TO GERMINATE SUFFICIENTLY, SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

EROSION AND SEDIMENT CONTROL NOTES:

1. NO WORK IS TO COMMENCE WITHOUT A PERMIT ISSUED BY THE APPROPRIATE REGULATORY AUTHORITY.
2. THE CONTRACTOR SHALL COMPLY WTH APPLICABLE PROVISIONS OF ALL REGULATORY PERMITS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION AND SEDIMENT CONTROL MEASURES AND IMPLEMENTING THE SWPPP AND MITIGATION PLANS.
4. ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICAL.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENT WITH CLEARING OPERATIONS, AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.
6. PRIOR TO THE START OF EXCAVATION OPERATIONS ON THE SITE, ALL EROSION CONTROL DEVICES SHALL BE IN PLACE.
7. CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. HOWEVER, PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EROSION CONTROL MEASURES OVER TEMPORARY EROSION CONTROL MEASURES.
8. INSPECTION AND MAINTENANCE OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS AND SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EROSION CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRATOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
9. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC.
10. SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EROSION AND SEDIMENTATION CONTROL MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. SILT FENCE MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
11. PERMANENT EROSION CONTROL MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING.
12. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS FROM ENTERING WATERS OF THE STATE/U.S.
13. THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES: INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THSES AREAS SHALL BE UTILIZED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
14. ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED AND THE PERMIT OR PERMITS ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

SPECIAL NOTES:

1. ALL STEEL GAS PIPE SHALL BE SCHEDULE 40 AND X-42 GRADE. ALL UNDERGROUND PIPING WILL BE COATED WITH FUSION BONDED EPOXY NO LESS THAN 14 MILS IN THICKNESS. PIPES INSTALLED BY BORE WILL BE COATED WITH POWERCRETE R-60 NO LESS THAN 40 MILS IN THICKNESS.
2. THE TOP OF ALL GAS LINES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 36 INCHES BELOW POST-GRADED SURFACE, UNLESS OTHERWISE INDICATED.
3. ALL INSTALLED LINES, INCLUDING SERVICE CONNECTIONS: PRESSURE TEST AND CHART RECORD ALL STEEL PIPE AT 375 PSIG FOR 24 HOURS FOR A MAOP OF 250 PSIG. PRESSURE TEST AND CHART RECORD ALL PE PIPE AT 150 PSIG FOR 8 HOURS FOR A MAOP OF 100 PSIG. THE SUPERVISOR OF THE PRESSURE TEST SHALL SIGN AND DATE THE CHART AND FORM AFTER THE LINE HAS BEEN TESTED SUCCESSFULLY IN ACCORDANCE WITH THE REQUESTS OF GREATER DICKSON GAS AUTHORITY.
4. LEAK TESTS OF ALL INSTALLED LINES, INCLUDING SERVICE LINES, SHALL BE PERFORMED IF THE PRESSURE TEST FAILS. ALL LEAKS SHALL BE FIXED PRIOR TO RESUMING PRESSURE TESTS.
5. INSTALLATION OF ALL PIPE, VALVES, METERS, REGULATORS, TEES AND ALL OTHER HARDWARE SHALL BE IN ACCORDANCE WITH 49 CFR 192.
6. ALL OCCUPANTS IN THE SURROUNDING BUILDINGS ARE TO BE NOTIFIED OF THE CONSTRUCTION SCHEDULE FOR THE PIPE REPLACEMENT.
7. CONTRACTOR TO INSTALL FITTINGS AS REQUIRED.
8. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THAT THE OWNER HAS LOCATED ALL UTILITIES IN THE AFFECTED AREA, REQUESTING ANY OTHER NECESSARY UTILITY LOCATIONS WHILE THE OWNER IS PRESENT, AND DOCUMENTING AND MAINTAINING UTILITY LOCATIONS THROUGHOUT THE CONSTRUCTION PROCESS.
9. PIPES SHALL BE BEDDED ON A FOUR INCH LAYER OF DIRT, LIMESTONE DUST OR SAND AND BACKFILLED TO A DEPTH OF 30% OF THE DIAMETER OF THE PIPE. CLASS B BEDDING SHALL BE SIZE NO. 7. CUTS IN EXISTING ROADWAYS SHALL BE BACKFILLED TO THE DEPTH OF THE CUT WITH NO. 7 STONE.
10. GREATER DICKSON GAS AUTHORITY REPRESENTATIVE, NOTIFIED BY THE CONTRACTOR, WILL VIEW AND DOCUMENT EXISTING UTILITY LOCATIONS. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES IN THE AFFECTED AREA, REQUESTING ANY OTHER UTILITY LOCATIONS WHILE THE OWNER IS PRESENT & DOCUMENTING AND MAINTAINING UTILITY LOCATIONS THROUGHOUT THE CONSTRUCTION PROCESS.
11. LOCATOR TAPE AND TRACER WIRE SHALL BE INSTALLED PER THE PROJECT MANUAL SPECIFICATIONS ALONG ALL NEW GAS LINES.
12. FACILITIES TO BE ABANDONED OR REMOVED SHALL BE DISCONNECTED FROM ALL POTENTIAL SOURCES OF GAS. ASSOCIATED VALVES SHALL BE LOCKED & TAGGED CLOSED. ABANDONED PIPELINES SHALL BE PURGED OF NATURAL GAS. IF AIR IS USED AS A PURGING MEDIUM, PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT A COMBUSTIBLE MIXTURE IS NOT PRESENT DURING OR AFTER PURGING. AFTER PURGING, THE ABANDONED PIPELINE MUST BE SEALED AT BOTH ENDS. PHYSICALLY REMOVE ALL ABANDONED FACILITIES IF PRACTICAL. IF THIS IS NOT FEASIBLE, SEVER BELOW GRADE AND REMOVE ALL ABOVE GROUND PIPING AND EQUIPMENT.
13. PAVEMENT REPAIR IS INCIDENTAL TO NATURAL GAS RELOCATION CONSTRUCTION.

AREA OF DISTURBANCE:

10' WIDTH X 3,455' LENGTH = 34,550 SQ. FT.
0.79 AC < 1 AC

SCOPE OF WORK:

THE SCOPE OF THE WORK REQUIRED UNDER THIS CONTRACT INCLUDES FURNISHING AND PAYING FOR ALL NECESSARY LABOR, TOOLS AND OTHER ITEMS AND CONSTRUCTING NATURAL GAS MAIN RELOCATION CONSISTING OF THE INSTALLATION OF 1" HDPE, 1-1/4" HDPE, 2" STEEL AND HDPE, 4" STEEL, 6" STEEL GAS LINES, AND 8" STEEL CASING PIPE, AND SERVICES. ALL PRICING IS TO INCLUDE THE COST OF CLEARING THE RIGHT-OF-WAY, INSTALLATION OF ANY RIP-RAP, SILT FENCE, SEED, STRAW AND FERTILIZER.

THE WORK ALSO INCLUDES HYDROSTATIC AND/OR OTHER TESTING AND OTHER APPURTENANCES COMPLETE IN EVERY DETAIL AND READY FOR THE OWNER'S BENEFICIAL USE AS INDICATED ON THE CONTRACT DRAWINGS OR LISTED ELSEWHERE IN THE CONTRACT SPECIFICATIONS. THIS CONTRACT WILL CONSIST GENERALLY OF, BUT SHALL NOT BE LIMITED TO, THE FOLLOWING: EROSION CONTROL, TRAFFIC CONTROL, PAVEMENT REPAIR, GAS LINE AND APPURTENANCES, TESTING AND PURGING, AND COORDINATION WITH GDGA FOR ALL CONNECTIONS WITH EXISTING GAS LINES. CONTRACTOR WILL BE RESPONSIBLE FOR THE PICKUP AND DELIVERY OF ALL CONSTRUCTION MATERIALS TO THE JOB SITE.

10-31-14

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GREATER DICKSON GAS AUTHORITY

NATURAL GAS RELOCATION

GENERAL NOTES

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-3

DICKSON COUNTY

REV. 10-31-14: REVISED PERMANENT EASEMENT QTY.; REMOVED EASEMENT FOR TRACT D.

UTILITY EASEMENTS

TRACT NO.	PROPERTY OWNER(S)	COUNTY RECORDS				TOTAL AREA (ACRES)	LENGTH OF LINE ACROSS PARCEL (LINEAR FEET)	EASEMENT (SQUARE FEET)
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE				
				BOOK	PAGE			PERMANENT
1	TRISTAR BANK	110D-D	003.00	605	246	3.530	125	1,875
2	CORNERSTONE II, LLC	110D-D	004.08	902	755	2.021	320	4,800
11	DICKSON HIGH SCHOOL	110D-C	008.00	-	-	17.834	100	1,500
16	AUTOZONE, INC., A NEVADA CORPORATION	110E-F	012.01	408	89	1.090	80	1,200
22	PINNACLE NATIONAL BANK	110	065.09	977	849	0.911	200	3,000
23	FLOYD E. ALBRIGHT, JR. AND WIFE, ANDREA H. ALBRIGHT	110	065.32	133	131	0.446	20	300
A	CEMETERY	110E-E	028.00	-	-	3.2	75	1,125
B	WESTERN 46 PROPERTIES, LLC	111	205.00	890	928	1.53	150	2,250
C	ARCITERRA VN DICKSON TN, LLC	120	003.27	875	648	0.92	75	1,125

10-31-14

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GREATER DICKSON GAS AUTHORITY

NATURAL GAS RELOCATION

UTILITY EASEMENTS

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-4

DICKSON COUNTY

REV. 10-31-14: REVISED ALIGNMENT OF PROPOSED 2" STEEL NATURAL GAS ACROSS TRACTS 1 AND 2.

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S5	635723.7001	1560845.8114	780.673	400+46.79	42.61	ALUM DISK
S6	636098.8606	1561134.8005	780.185	398+71.72	495.19	ALUM DISK
S7	635543.0891	1561622.2140	808.057	392+41.49	-37.73	ALUM DISK

D1
TOP-801.61
FULL OF DEBRIS;
PIPE SIZE, ORIGIN,
& DESTINATION UNK.

D2
TOP-800.95
FULL OF DEBRIS;
PIPE SIZE, ORIGIN,
& DESTINATION UNK.

D3
TOP-800.14
FULL OF DEBRIS;
PIPE SIZE, ORIGIN,
& DESTINATION UNK.

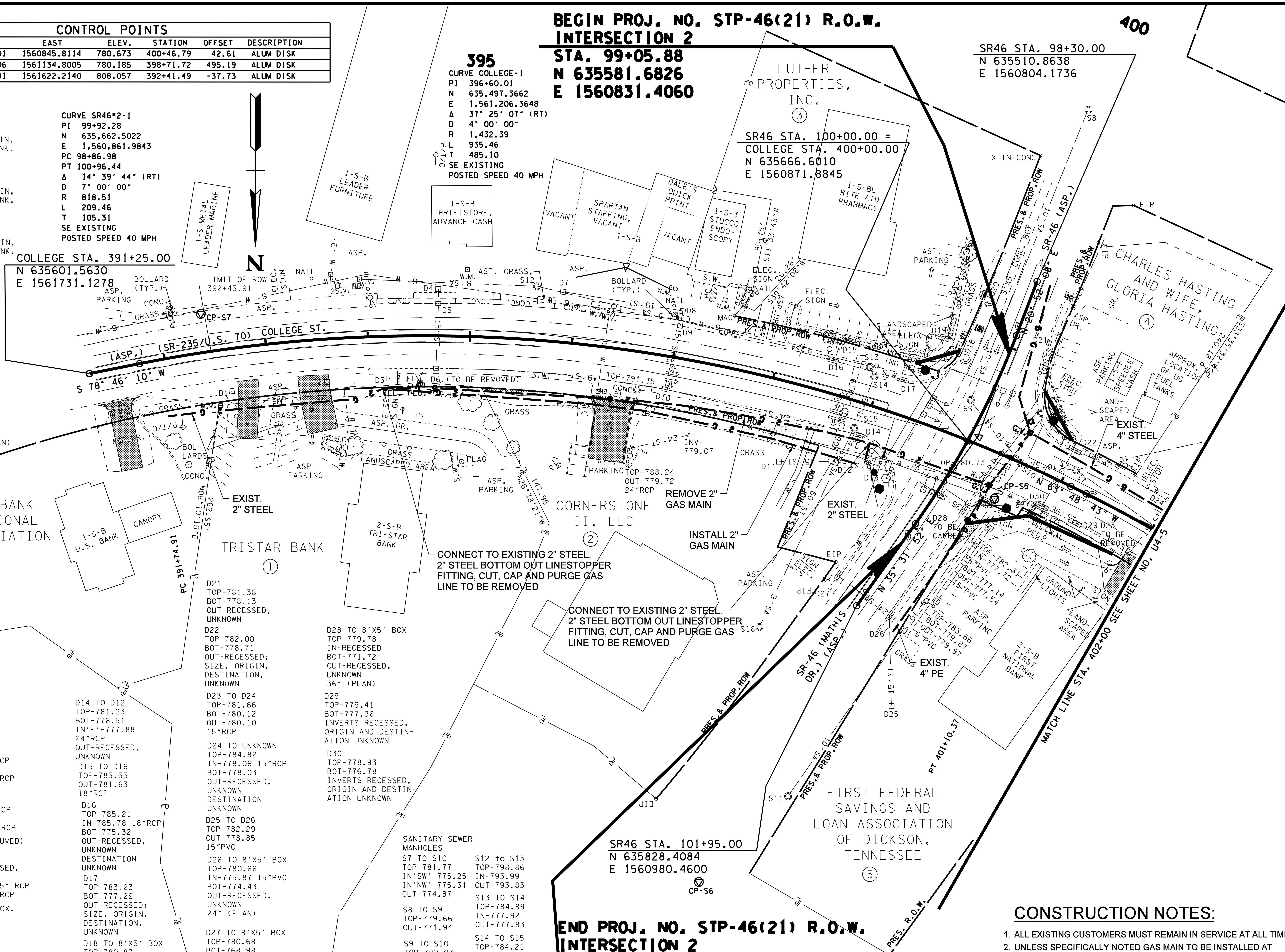
D4 TO D5
TOP-802.60
BOT-800.75
OUT-800.72
15"RCP

D5 TO D6
TOP-801.97
IN-799.97
BOT-797.95
OUT-RRECESSED
UNKNOWN.
15" (TAKEN
FROM PLAN)

D6 TO D10
TOP-799.05
BOT-796.02
INV-RECESSED
UNKNOWN.
IN-15", OUT-18"
(TAKEN FROM PLAN)

CURVE SR46#2-1
PI 99+92.28
N 635,662.5022
E 1,560,861.9843
PC 98+86.98
PT 100+96.44
Δ 14° 39′ 44″ (RT)
D 7° 00′ 00″
R 818.51
L 209.46
T 105.31
SE EXISTING
POSTED SPEED 40 MPH

CURVE COLLEGE-1
PI 396+60.01
N 635,497.3662
E 1,561,206.3648
Δ 37° 25′ 07″ (RT)
D 4° 00′ 00″
R 1,432.39
L 935.46
T 485.10
SE EXISTING
POSTED SPEED 40 MPH



LEGEND

PROPOSED	—X" G—
REMAIN	- -X" G- -
ABANDON OR REMOVE	- -X" G- -
TEMPORARY	—TEMP/G—

D7 TO D8
TOP-797.39
BOT-795.30
OUT-795.33
15"RCP

D8 TO D9
TOP-791.86
IN-789.81 15"RCP
BOT-789.72
OUT-789.61 15"RCP

D9 TO D10
TOP-792.26
IN-788.97 15"RCP
BOT-788.79
OUT-788.74 15"RCP

D10 TO D14(ASSUMED)
TOP-789.41
BOT-785.16
IN'E'-18"RECESSED,
UNKNOWN
IN'S'-785.25 15" RCP
OUT-784.87 24"RCP

D11 TO CONC. BOX.
DETENTION POND
OVERFLOW
STRUCTURE
TOP-779.00
OUT-776.94

D12 TO CONC. BOX
TOP-778.68
IN'W'-775.28 15"RCP
IN'S'-771.29 24"RCP
BOT-771.39
OUT'E'-771.31 CUT OUT
HOLE INTO CONC. BOX

D13 TO D12
TOP-780.11
BOT-777.80
OUT-RECESSED,
UNKNOWN

D14 TO D12
TOP-781.23
BOT-776.51
IN'E'-777.88
24"RCP
OUT-RECESSED,
UNKNOWN

D15 TO D16
TOP-785.55
OUT-781.63
18"RCP

D16
TOP-785.21
IN-785.78 18"RCP
BOT-775.32
OUT-RECESSED,
UNKNOWN
DESTINATION
UNKNOWN

D17
TOP-783.23
BOT-777.29
OUT-RECESSED;
SIZE, ORIGIN,
DESTINATION,
UNKNOWN

D18 TO 8'X5' BOX
TOP-780.87
BOT-775.05
OUT-775.10 24"RCP

D19
TOP-782.38
BOT-778.57
OUT-778.53 15"RCP
DESTINATION
UNKNOWN

D20 TO 8'X5' BOX
TOP-780.38
BOT-777.20
OUT-24"RCP

D21
TOP-781.38
BOT-778.13
OUT-RECESSED,
UNKNOWN

D22
TOP-782.00
BOT-778.71
OUT-RECESSED;
SIZE, ORIGIN,
DESTINATION,
UNKNOWN

D23 TO D24
TOP-781.66
BOT-780.12
OUT-780.10
15"RCP

D24 TO UNKNOWN
TOP-784.82
IN-778.06 15"RCP
BOT-778.03
OUT-RECESSED,
UNKNOWN
DESTINATION
UNKNOWN

D25 TO D26
TOP-782.29
OUT-778.85
15"PVC

D26 TO 8'X5' BOX
TOP-780.66
IN-775.87 15"PVC
BOT-774.43
OUT-RECESSED,
UNKNOWN
24" (PLAN)

D27 TO 8'X5' BOX
TOP-780.68
BOT-768.98
OUT-RECESSED,
UNKNOWN
24" (PLAN)

D28 TO 8'X5' BOX
TOP-779.78
IN-RECESSED
BOT-771.72
OUT-RECESSED,
UNKNOWN
36" (PLAN)

D29
TOP-779.41
BOT-777.36
INVERTS RECESSED,
ORIGIN AND DESTIN-
ATION UNKNOWN

D30
TOP-778.93
BOT-776.78
INVERTS RECESSED,
ORIGIN AND DESTIN-
ATION UNKNOWN

SANITARY SEWER
MANHOLES

S7 TO S10
TOP-781.77
IN'SW'-775.25
IN'NW'-775.31
OUT-774.87

S8 TO S9
TOP-779.66
OUT-771.94

S9 TO S10
TOP-782.07
IN-770.48
OUT-770.43

S10 TO S11
TOP-781.07
IN'W'-769.23
IN'SE'-769.85
OUT-769.03

S11
TOP-782.83
IN-759.16

S12 to S13
TOP-798.86
IN-793.99
OUT-793.83

S13 TO S14
TOP-784.89
IN-777.92
OUT-777.83

S14 TO S15
TOP-784.21
IN'S'-777.04 8"
IN'W'-777.03 8"
(ORIGIN UNKNOWN)
OUT-769.77

S15 TO S16
TOP-781.92
IN-769.30
OUT-769.23

S16
TOP-783.73
IN-768.02

CONSTRUCTION NOTES:

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4. BASE SURVEY WAS PROVIDED BY TDOT. ONLY THE INFORMATION REGARDING NATURAL GAS MAIN RELOCATION HAS BEEN PROVIDED BY JAMES+ASSOCIATES, INC.
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JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE
10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON
GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO. 2
STA.391+25 TO STA.402+00

SCALE: 1"= 50′

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-5

DICKSON COUNTY

REV. 8-18-14: REVISED BUS. ENT. AT STA. 402+83.83 AND STA. 403+63.53 FOR TRACT NO. 6.

SANITARY SEWER MANHOLES

S1 TO S2
TOP-810.81
OUT-804.75

S2 TO S3
TOP-807.79
IN-803.48
OUT-803.48

S3 TO S5
TOP-807.47
IN'NW'-802.02
IN'NE'-802.06
OUT-801.99

S4 TO S5
TOP-802.01
OUT-796.89

S5 TO S7
TOP-794.44
IN'NW'-790.24
IN'NE'-790.34
OUT-790.19

S6 TO S7
TOP-785.41
OUT-776.61

D31 TO D35
TOP-793.45
OUT-791.40
15"RCP

D32 TO D35
TOP-794.97
OUT-790.09
24"RCP

D33 TO D35
TOP-794.34
OUT-788.92
18"RCP

D34 TO D35
TOP-793.92
OUT-791.02
15"RCP

D35
JUNCTION BOX
NOT FOUND
APPROXIMATE
LOCATION SHOWN
DESTINATION
UNKNOWN

D36 TO D41
TOP-807.45
OUT-804.99
18"RCP

D37 TO D41
TOP-808.44
OUT-805.32
15"RCP

D38 TO D41
TOP-808.35
OUT-805.60
15"RCP

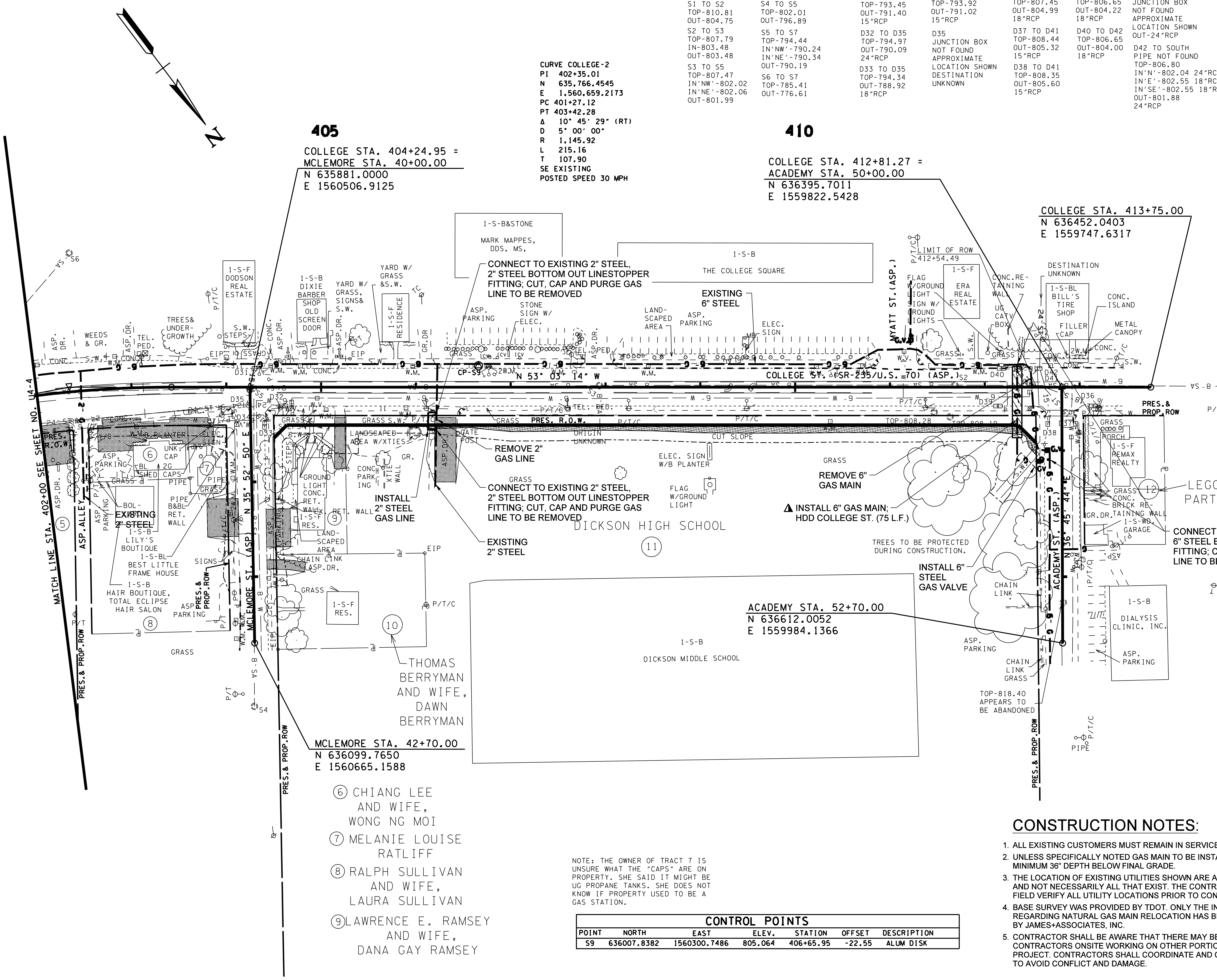
D39 TO D42
TOP-806.65
OUT-804.22
18"RCP

D40 TO D42
TOP-806.65
OUT-804.00
18"RCP

D41 TO D42
JUNCTION BOX
NOT FOUND
APPROXIMATE
LOCATION SHOWN
OUT-24"RCP

D42 TO SOUTH
PIPE NOT FOUND
TOP-806.80
IN'N'-802.04 24"RCP
IN'E'-802.55 18"RCP
IN'SE'-802.55 18"RCP
OUT-801.88
24"RCP

CURVE COLLEGE-2
PI 402+35.01
N 635,766.4545
E 1,560,659.2173
PC 401+27.12
PT 403+42.28
Δ 10° 45′ 29″ (RT)
D 5° 00′ 00″
R 1,145.92
L 215.16
T 107.90
SE EXISTING
POSTED SPEED 30 MPH



⑥ CHIANG LEE AND WIFE, WONG NG MOI

⑦ MELANIE LOUISE RATLIFF

⑧ RALPH SULLIVAN AND WIFE, LAURA SULLIVAN

⑨ LAWRENCE E. RAMSEY AND WIFE, DANA GAY RAMSEY

NOTE: THE OWNER OF TRACT 7 IS UNSURE WHAT THE "CAPS" ARE ON PROPERTY. SHE SAID IT MIGHT BE UG PROPANE TANKS. SHE DOES NOT KNOW IF PROPERTY USED TO BE A GAS STATION.

CONTROL POINTS						
POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S9	636007.8382	1560300.7486	805.064	406+65.95	-22.55	ALUM DISK

LEGEND

PROPOSED	——X" G——
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

▲ DENOTES: REFER TO CROSS-SECTIONS SHEET U2-17 FOR ADDITIONAL INFORMATION

CONSTRUCTION NOTES:

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JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE

10-31-14

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GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO. 2
STA.402+00 TO STA.413+00

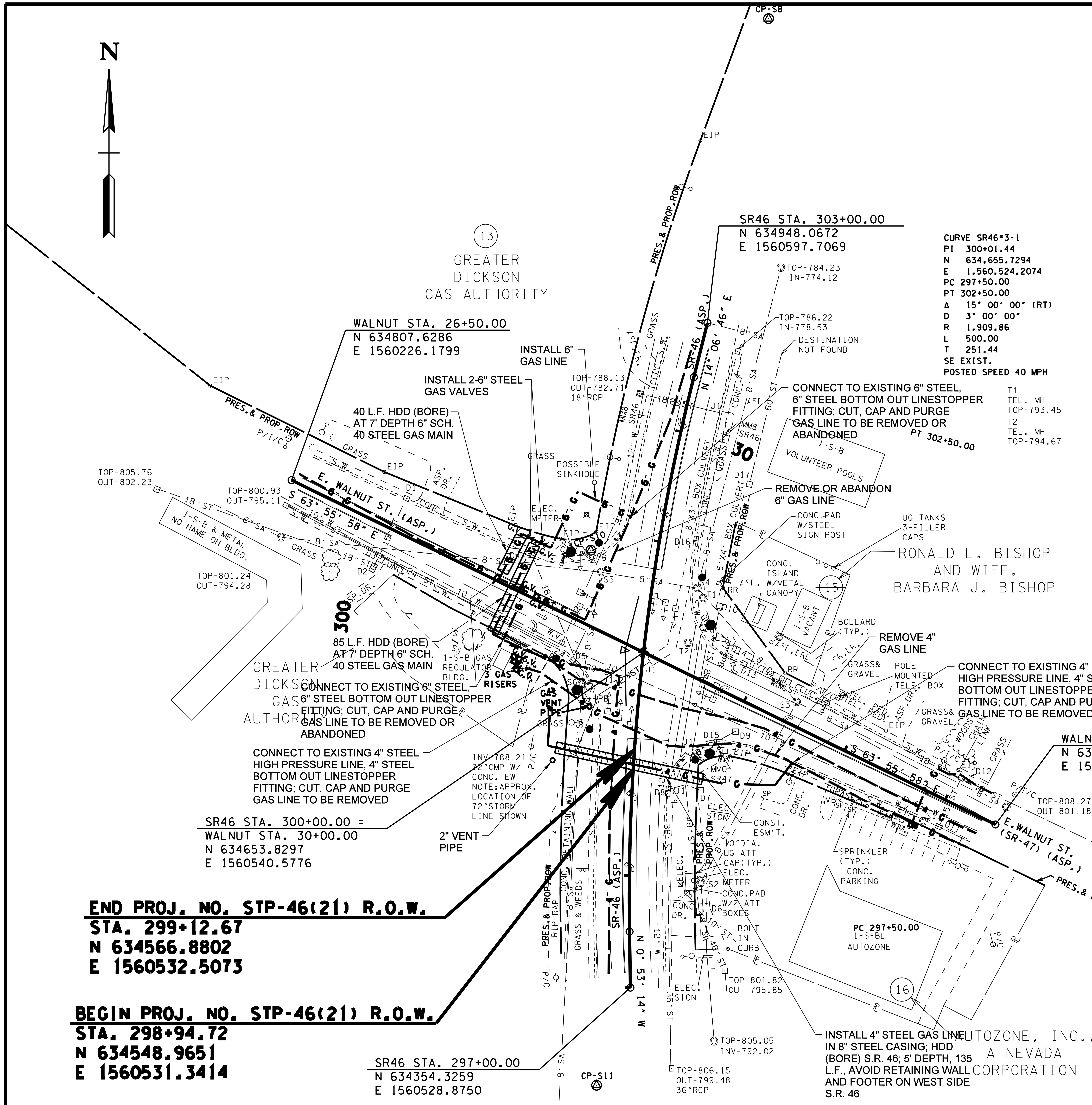
SCALE: 1"= 50'

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-6

DICKSON COUNTY

REV. 10-31-14: EDITED NATURAL GAS UTILITY CALLOUT FOR ERRORS.



SANITARY SEWER MANHOLES

S1
TOP-805.48
NO FLOW. ABOUT 1' OF STANDING WATER W/DEBRIS. APPEARS TO NOT BE IN USE.

S2
TOP-801.01
IN-790.57
BOT-790.57
OUT-790.57

S3
TOP-797.07
IN'E'-789.09
IN'S'-789.48
BOT-788.97
OUT-788.85

S4
TOP-793.63
IN'SE'-779.19
IN'W'-779.14
BOT-779.12
OUT-779.10

S5
TOP-793.60
IN'S'-783.66
IN'W'-783.59
BOT-783.40
OUT-783.20

S6
TOP-796.20
IN-785.60
BOT-785.50
OUT-785.40

STORM DRAINAGE STRUCTURES

J1
NOTE: ALL UNDERGROUND STORM DRAINAGE LINE LOCATIONS @ BLIND PIPE INTERSECTIONS AND JUNCTION BOXES ALONG WITH JUNCTION BOX LOCATIONS SHOWN HEREON WERE INTERPOLATED FROM PLANS OR ASSUMED.

D1
TOP-797.44
OUT-793.68
15"RCP

D2
TOP-797.46
IN-793.78 18"RCP
BOT-793.39
OUT-793.37 24"RCP

D3
TOP-797.60
IN'S'-793.14 24"RCP
IN'W'-793.53 15"RCP
IN'N'-793.05 15"RCP
BOT-792.98
OUT-792.90

D4
TOP-794.87
OUT-791.72
18"RCP

D5
TOP-794.80
IN'W'-788.48 24"RCP
IN'N'-788.47 18"RCP
BOT-788.42
OUT-788.22 30"RCP

D6
TOP-801.31
IN-799.62 10"PVC
ORIGIN UNKNOWN
IN-792.65 48"RCP
BOT-792.56
OUT-792.51

D7
TOP-797.07
OUT-794.17
18"RCP

D8
TOP-799.05
IN-792.48 36"RCP
BOT-792.36
OUT-792.35 36"RCP

D9
TOP-796.94
IN-794.68 12"RCP
BOT-792.39
OUT-792.15

D10
TOP-792.91
IN-785.59 48"RCP
BOTTOM 785.19
OUT-785.15
4.8X4.8 BOX CULV. (MEASURED)
5'X4'(PLAN; SEE D16)

D11
TOP-805.69
OUT-803.61

D12
TOP-805.32
IN'E'-799.21 18"RCP
IN'S'-802.42 15"RCP
BOT-799.30
OUT-799.09 18"RCP

D13
TOP-795.19
IN-790.01 18"RCP
BOT-789.90 18"RCP
OUT-789.77

D14
TOP-794.96
IN-789.53
BOT-789.53
OUT-789.48

D15
TOP-796.50
OUT-794.68
12"RCP TO D9

D16
TOP-791.48
IN-784.03
OUT-783.94
8'X3' BOX ACCORDING TO PLAN SHT. 9A CONST. PROJ. # 22004-3228-04

D17
TOP-789.14
IN-782.73
OUT-782.82
60"RCP

LEGEND

PROPOSED	——X" G——
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S8	635219.9261	1560652.2717	781.292	OffChain	OffChain	ALUM DISK
S10	634744.9899	1560493.4745	794.209	300+82.60	-59.13	ALUM DISK
S11	634267.0911	1560498.6707	809.271	OffChain	OffChain	ALUM DISK

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JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE
10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO.3

SCALE: 1"= 50'

$$$$SYTIME$$$$$$

$$$$DGNSPEC$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-7

DICKSON COUNTY

STORM DRAINAGE STRUCTURES

D1
TOP-851.57
OUT-849.08
15"RCP

D2
TOP-851.27
IN-848.07
15"RCP
BOT-847.62
OUT-847.53
18"RCP

D3 (TO BE REMOVED)
TOP-854.97
IN-'SW'-844.66
18"RCP
IN'NW'-851.17
18"RCP
BOT-840.77
OUT-840.76
18"RCP

D4
INV-852.34
8"PVC W/
STONE EW

D5
INV-851.18
18"RCP
W/CONC. EW

D6
INV-854.22
W/CONC. EW

D7
INV-852.77
W/CONC. EW

D8
INV-858.58
W/CONC. EW

D9
INV-859.25
W/CONC. EW

D10
TOP-854.35
OUT-840.54
18"RCP

D11
TOP-863.19
OUT-859.88
18"RCP

D12
INV-875.83
18"CMP

D13
INV-872.76
18"CPP

D14
INV-869.54

D15
INV-867.57

D16
INV-868.79

D17
NOT FOUND
APPROX.
LOC. SHOWN

D18
INV-864.90
W/CONC. EW
22"X14" RCP

D19
INV-863.66
W/CONC. EW
22"X14" RCP

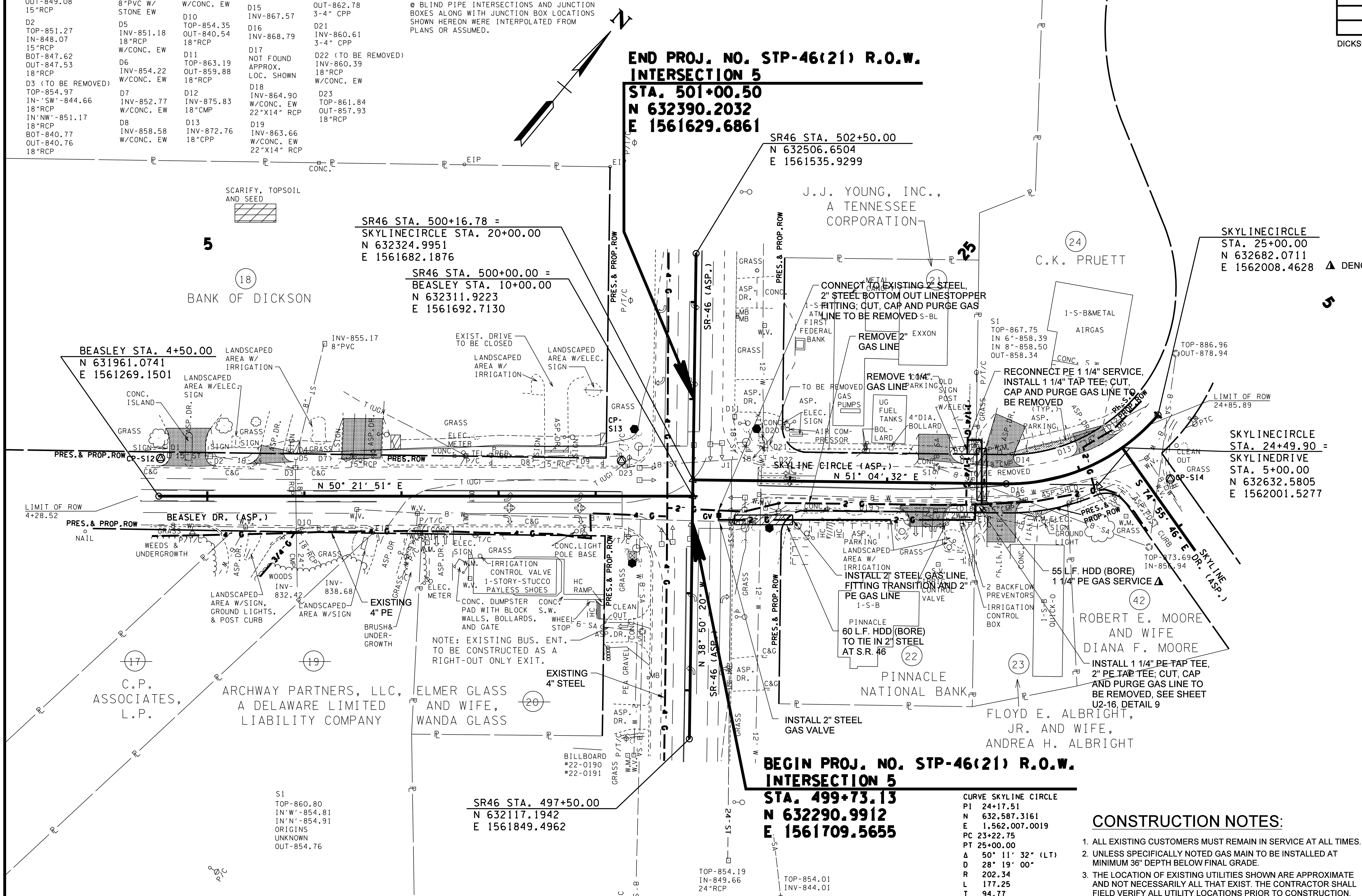
D20 (TO BE REMOVED)
TOP-863.39
OUT-862.78
3-4" CPP

D21
INV-860.61
3-4" CPP

D22 (TO BE REMOVED)
INV-860.39
18"RCP
W/CONC. EW

D23
TOP-861.84
OUT-857.93
18"RCP

J1
NOTE: ALL UNDERGROUND STORM DRAINAGE LINE LOCATIONS @ BLIND PIPE INTERSECTIONS AND JUNCTION BOXES ALONG WITH JUNCTION BOX LOCATIONS SHOWN HEREON WERE INTERPOLATED FROM PLANS OR ASSUMED.



CURVE SKYLINE CIRCLE
PI 24+17.51
N 632,587.3161
E 1,562,007.0019
PC 23+22.75
PT 25+00.00
Δ 50° 11' 32" (LT)
D 28° 19' 00"
R 202.34
L 177.25
T 94.77
SE EXISTING
POSTED SPEED 30 MPH

LEGEND

PROPOSED	——X" G——
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

▲ DENOTES: REFER TO CROSS-SECTIONS SHEET U2-17 FOR ADDITIONAL INFORMATION

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S12	631992.2161	1561245.7452	852.380	4+51.84	-38.91	ALUM DISK (BEASLEY)
S13	632293.2359	1561612.9534	862.598	9+26.66	-36.49	ALUM DISK (BEASLEY)
S14	632639.4348	1562060.2400	878.627	24+67.07	55.84	ALUM DISK (SKYLINE)

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JAMES R. GILLESPIE JR. — REGISTERED ENGINEER — NO. 102690 — STATE OF TENNESSEE
10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO.5

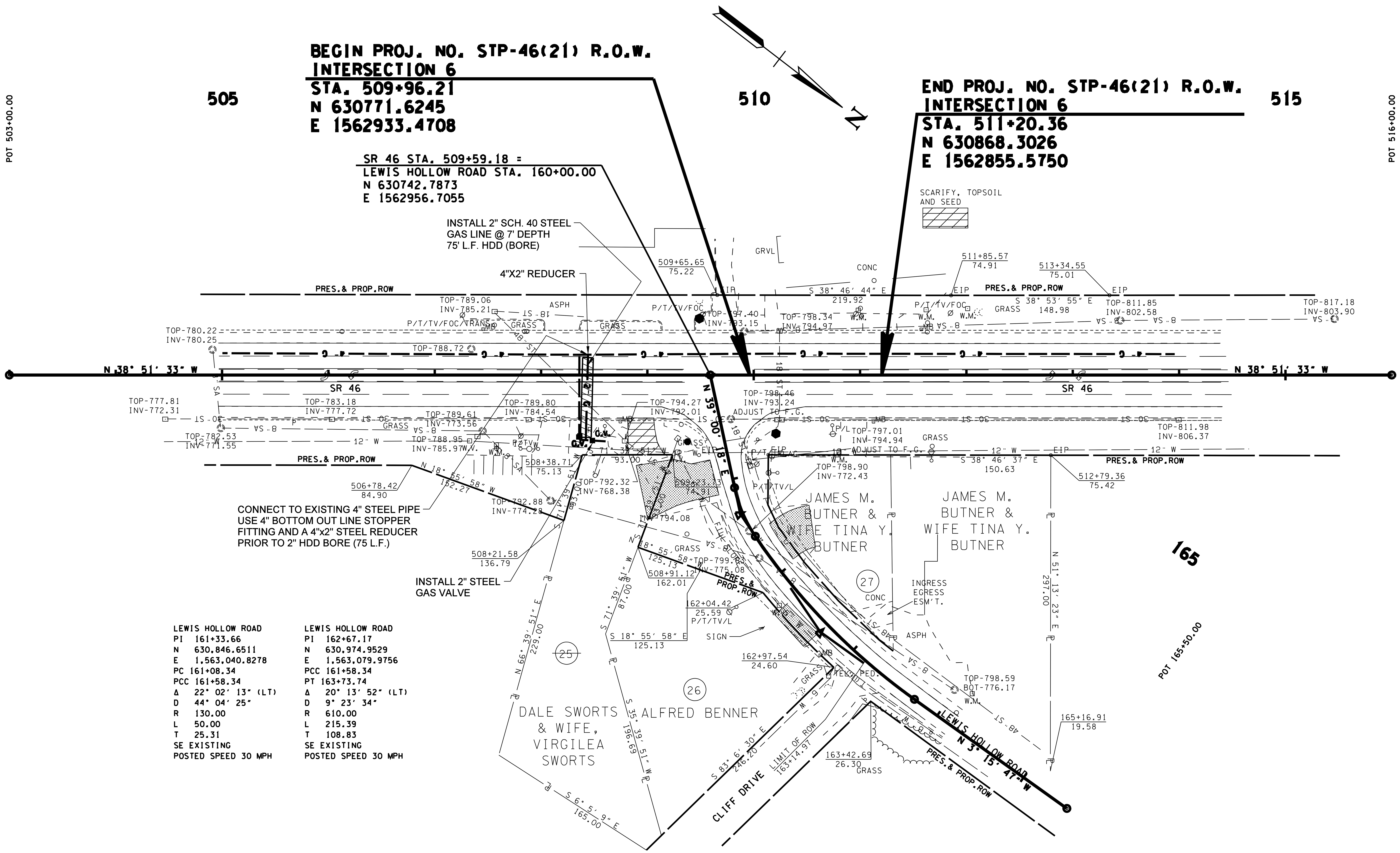
SCALE: 1"= 50'

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-8

DICKSON COUNTY

REV. 10-31-14: EDITED NATURAL GAS UTILITY CALLOUT FOR ERRORS.



LEWIS HOLLOW ROAD	LEWIS HOLLOW ROAD
PI 161+33.66	PI 162+67.17
N 630,846.6511	N 630,974.9529
E 1,563,040.8278	E 1,563,079.9756
PC 161+08.34	PCC 161+58.34
PCC 161+58.34	PT 163+73.74
Δ 22° 02' 13" (LT)	Δ 20° 13' 52" (LT)
D 44° 04' 25"	D 9° 23' 34"
R 130.00	R 610.00
L 50.00	L 215.39
T 25.31	T 108.83
SE EXISTING	SE EXISTING
POSTED SPEED 30 MPH	POSTED SPEED 30 MPH

LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE

10-31-14

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GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO.6

SCALE: 1"= 50'

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-9

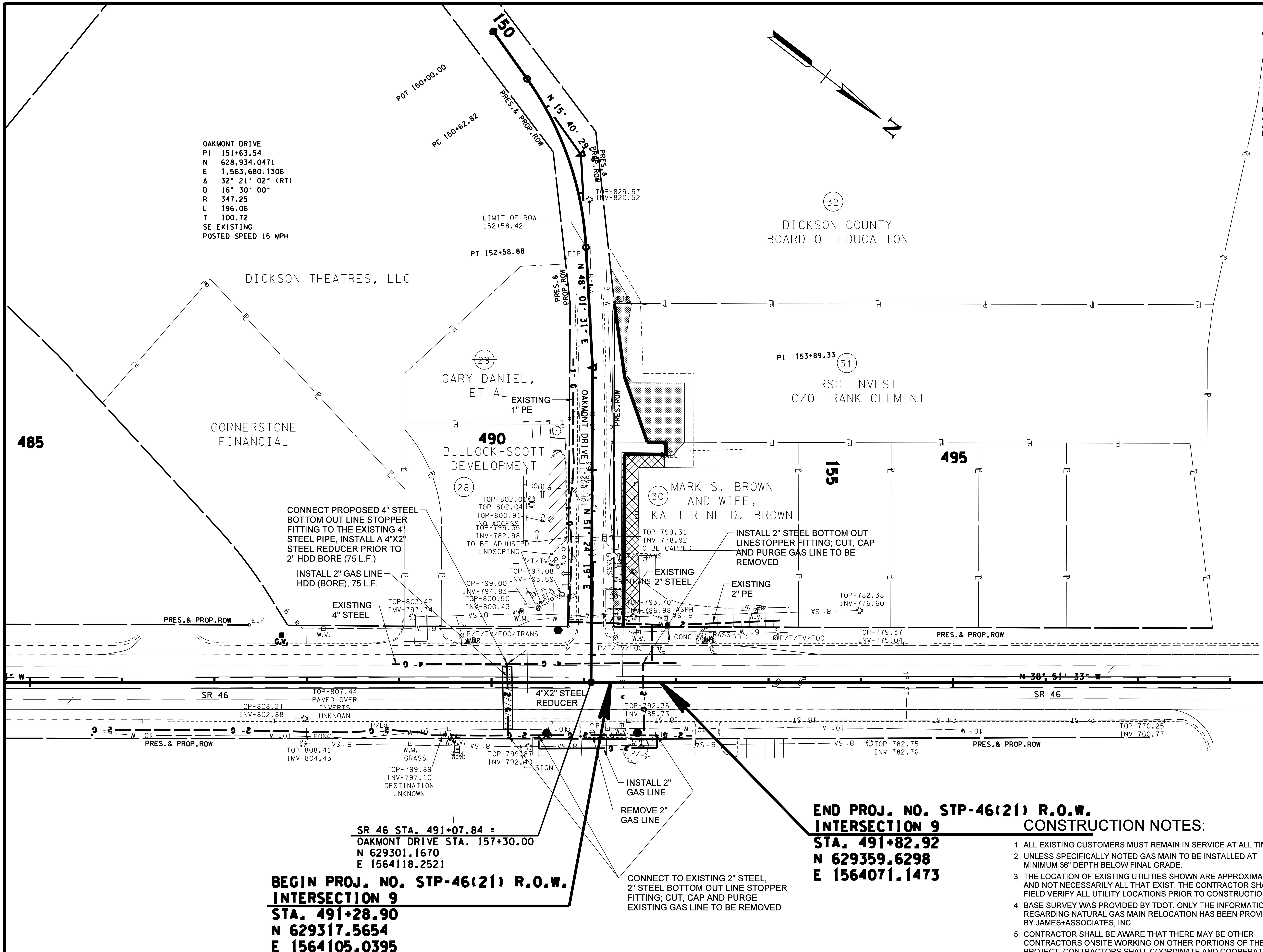
DICKSON COUNTY

REV. 8-18-14: REVISED PROP. R.O.W., SLOPE ESM'T, AND CONST. ESM'T FOR TRACT NOS. 30 AND 31. ADDED NOTE TO CONTRACTOR FOR ADDITIONAL PAVING ON TR. NO. 30.

REV. 10-31-14: CLARIFIED NATURAL GAS UTILITY CALLOUT.

LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—



CONSTRUCTION NOTES:

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JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102590 STATE OF TENNESSEE

10-31-14

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GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO.9

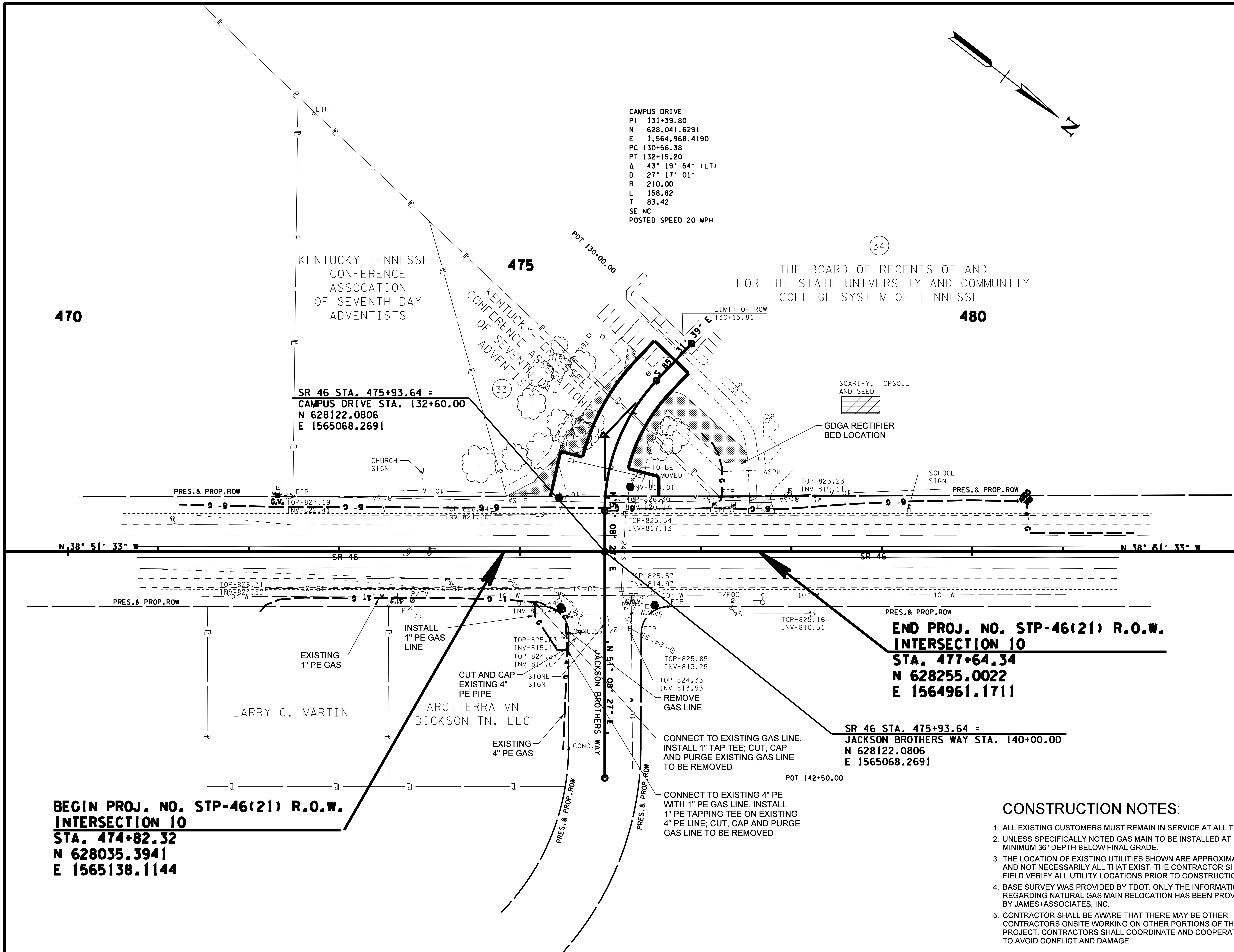
SCALE: 1"= 50'

$$$$SYTIME$$$$$
$$$$DGNSPEC$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-10

DICKSON COUNTY

REV. 10-31-14: REVISED NATURAL GAS UTILITY CALLOUT.



LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

CONSTRUCTION NOTES:

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10-31-14

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GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

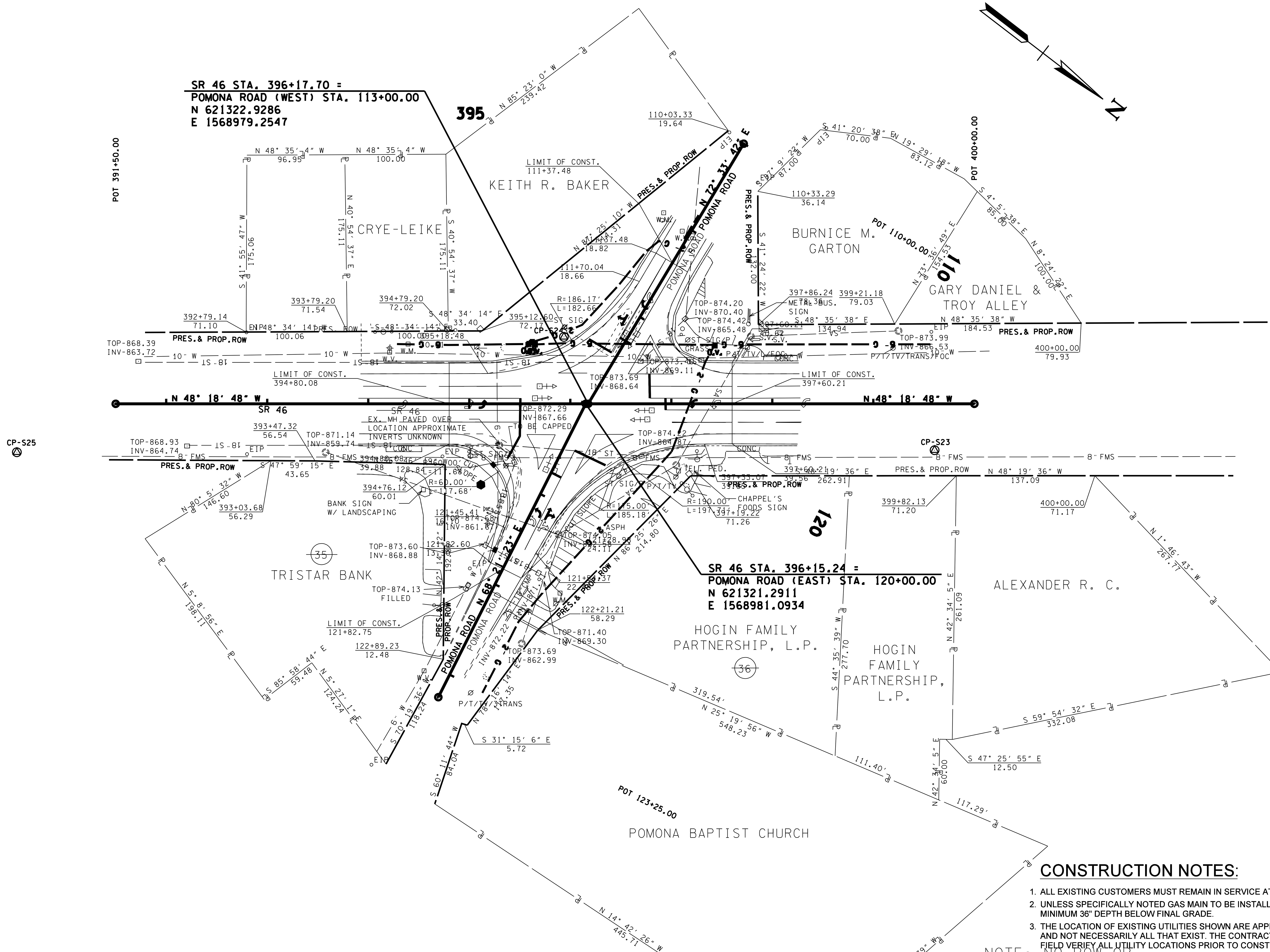
INTERSECTION NO. 10

SCALE: 1"= 50′

$$$$SYTIME$$$$$$ $$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-11

DICKSON COUNTY



LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

NO NATURAL GAS UTILITY RELOCATION REQUIRED

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S23	621585.2820	1568753.6448	873.44	399+60.67	45.88' (RT)
S24	621257.4832	1568953.1085	873.68	395+93.70	66.26' (LT)

NOTE: NO ROW OR EASEMENTS REQUIRED

CONSTRUCTION NOTES:

1. ALL EXISTING CUSTOMERS MUST REMAIN IN SERVICE AT ALL TIMES.
2. UNLESS SPECIFICALLY NOTED GAS MAIN TO BE INSTALLED AT MINIMUM 36" DEPTH BELOW FINAL GRADE.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE AND NOT NECESSARILY ALL THAT EXIST. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. BASE SURVEY WAS PROVIDED BY TDOT. ONLY THE INFORMATION REGARDING NATURAL GAS MAIN RELOCATION HAS BEEN PROVIDED BY JAMES+ASSOCIATES, INC.
5. CONTRACTOR SHALL BE AWARE THAT THERE MAY BE OTHER CONTRACTORS ONSITE WORKING ON OTHER PORTIONS OF THE PROJECT. CONTRACTORS SHALL COORDINATE AND COOPERATE TO AVOID CONFLICT AND DAMAGE.

JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE
10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO. 11

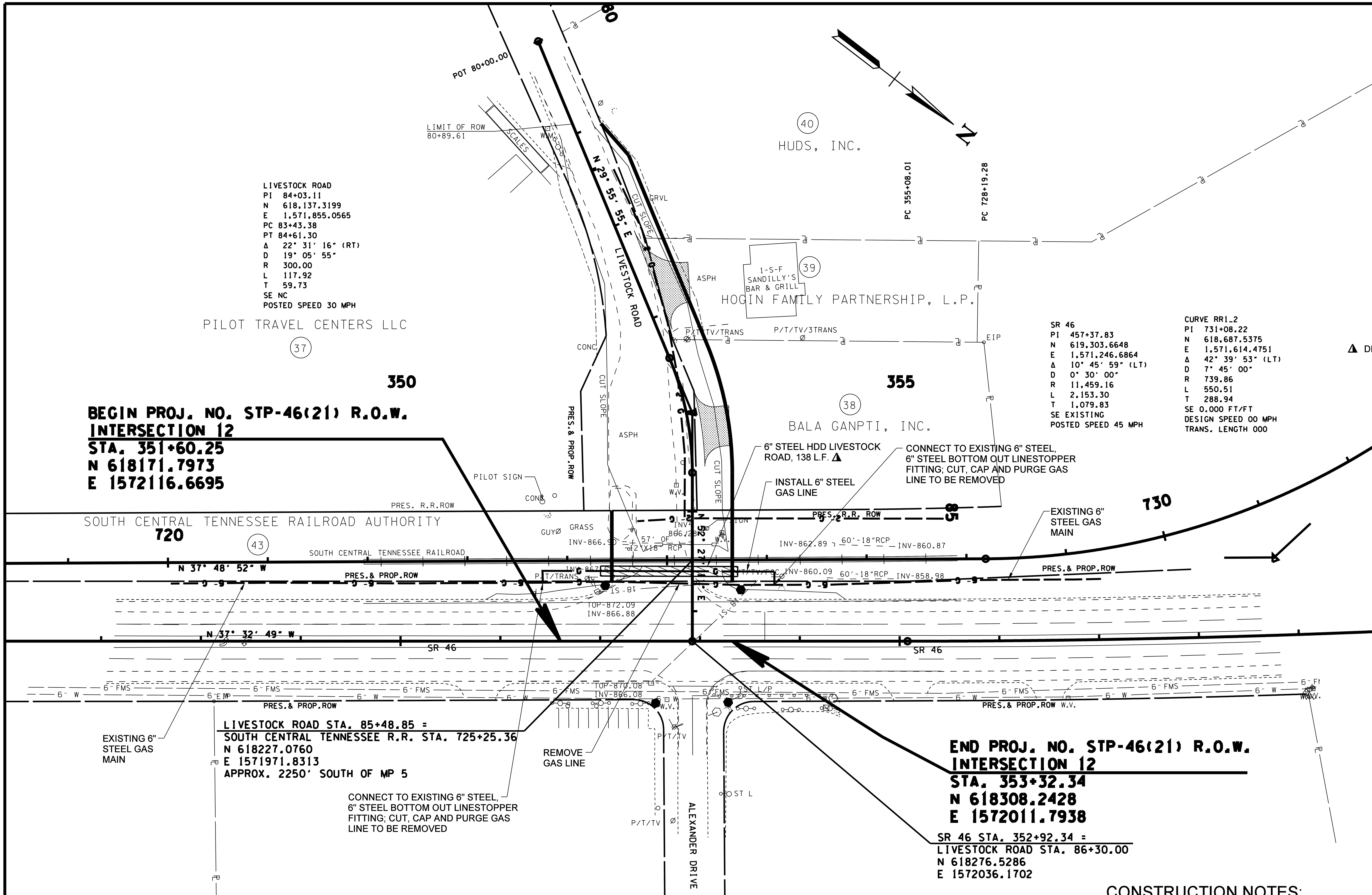
SCALE: 1"= 50'

$$$$SYTIME$$$$$
$$$$DGNSPEC$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-12

DICKSON COUNTY

REV. 04-30-14: ADDED BUILDING TO TRACT NO. 39.



LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

▲ DENOTES: REFER TO CROSS-SECTIONS SHEET U2-17 FOR ADDITIONAL INFORMATION

EASEMENT NOTE:
EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD

CONSTRUCTION NOTES:

1. ALL EXISTING CUSTOMERS MUST REMAIN IN SERVICE AT ALL TIMES.
2. UNLESS SPECIFICALLY NOTED GAS MAIN TO BE INSTALLED AT MINIMUM 36" DEPTH BELOW FINAL GRADE.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE AND NOT NECESSARILY ALL THAT EXIST. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. BASE SURVEY WAS PROVIDED BY TDOT. ONLY THE INFORMATION REGARDING NATURAL GAS MAIN RELOCATION HAS BEEN PROVIDED BY JAMES+ASSOCIATES, INC.
5. CONTRACTOR SHALL BE AWARE THAT THERE MAY BE OTHER CONTRACTORS ONSITE WORKING ON OTHER PORTIONS OF THE PROJECT. CONTRACTORS SHALL COORDINATE AND COOPERATE TO AVOID CONFLICT AND DAMAGE.

JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102590 STATE OF TENNESSEE

10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

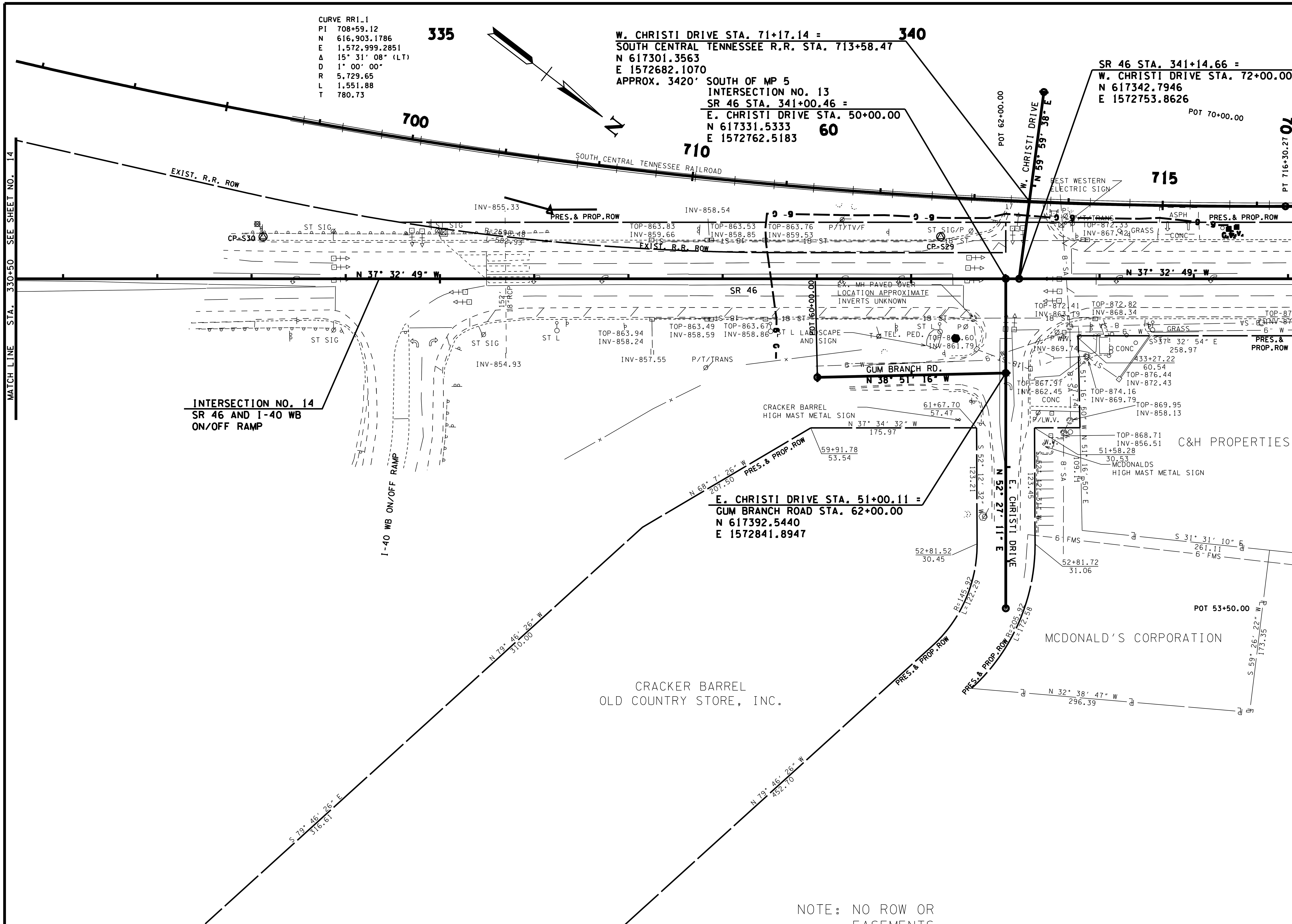
INTERSECTION NO. 12

SCALE: 1"= 50′

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-13

DICKSON COUNTY



NOTE: NO ROW OR EASEMENTS REQUIRED.

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S30	616679.5319	1573207.5594	872.31	333+12.30	44.48′ (LT)
S29	617249.4968	1572769.1776	867.69	340+31.35	44.71′ (LT)

LEGEND

PROPOSED	——X" G——
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

NO NATURAL GAS UTILITY RELOCATION REQUIRED

JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE

10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO. 13 & 14

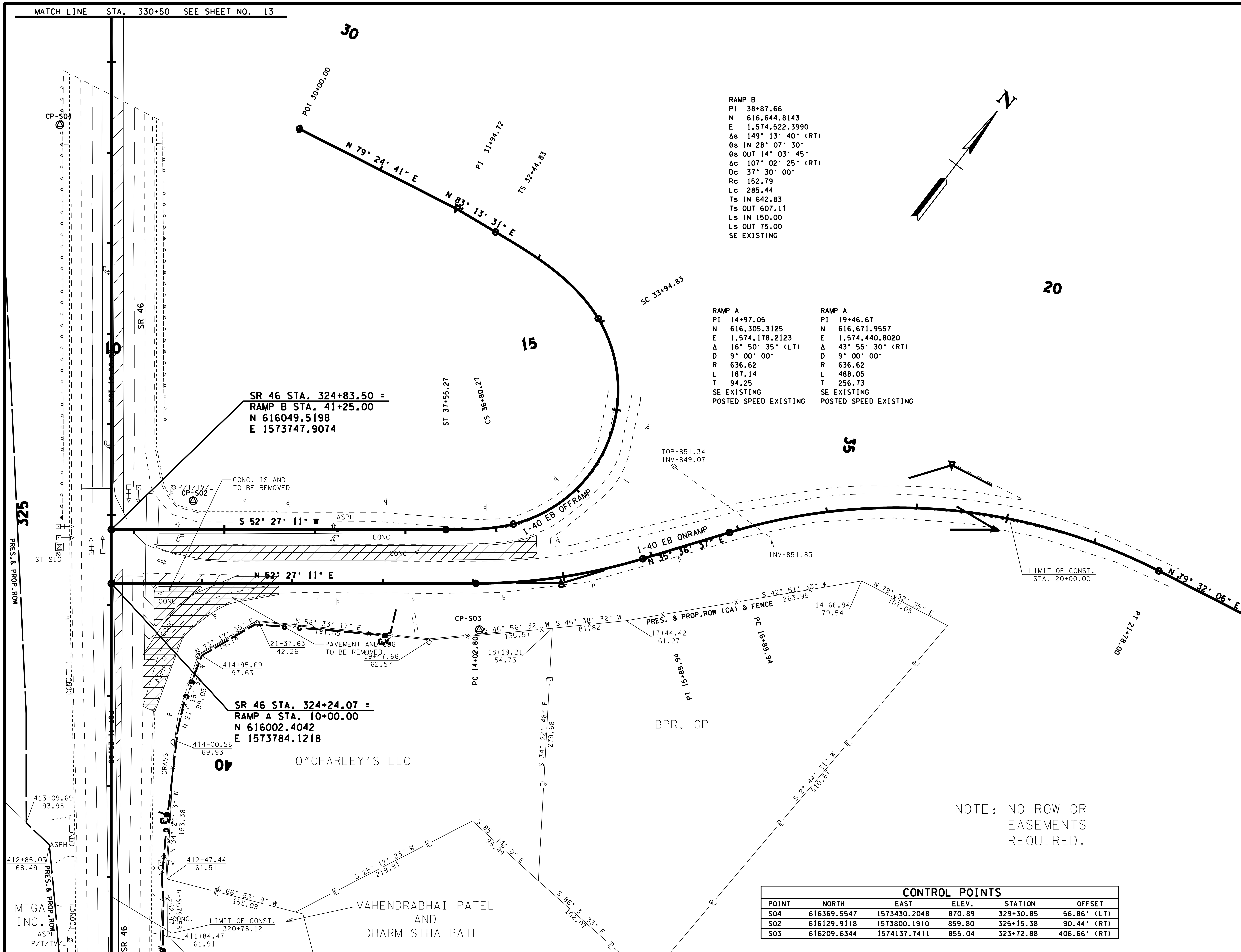
SCALE: 1"= 50′

$$$$SYTIME$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-14

DICKSON COUNTY

REV. 8-01-14: ADDED 40' LOWERED CURB LT. STA. 183+25.00.



LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

NO NATURAL GAS UTILITY RELOCATION REQUIRED

NOTE: NO ROW OR EASEMENTS REQUIRED.

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S04	616369.5547	1573430.2048	870.89	329+30.85	56.86' (LT)
S02	616129.9118	1573800.1910	859.80	325+15.38	90.44' (RT)
S03	616209.6344	1574137.7411	855.04	323+72.88	406.66' (RT)

JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE

10-31-14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

INTERSECTION NO. 15

SCALE: 1"= 50'

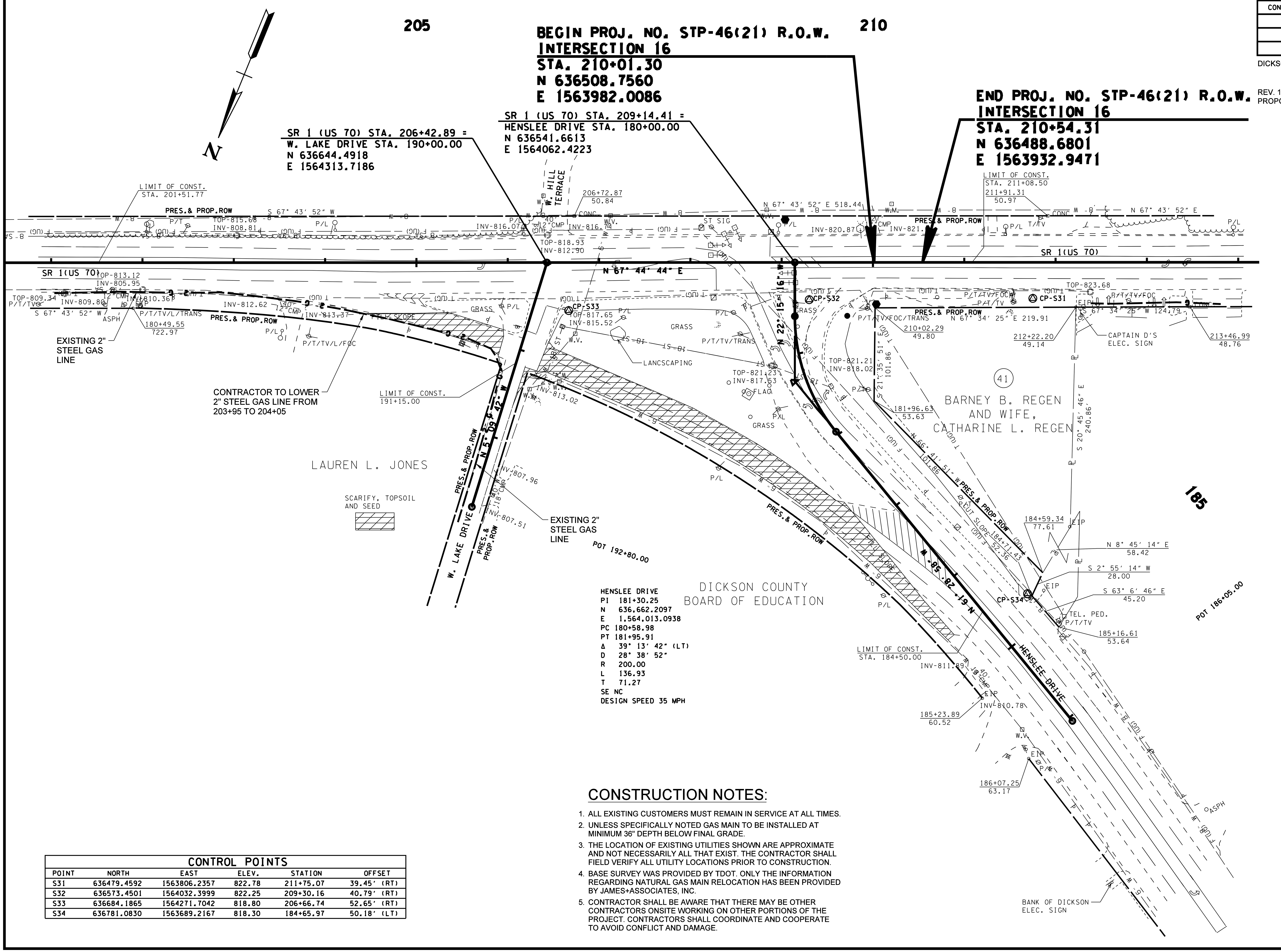
$$$$SYTIME$$$$$

$$$$DGNSPEC$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-15

DICKSON COUNTY

REV. 10-31-14: REVISED ALIGNMENT OF PROPOSED 2" STEEL NATURAL GAS UTILITY.



LEGEND

PROPOSED	—X" G—
REMAIN	– –X" G– –
ABANDON OR REMOVE	– –X" G– –
TEMPORARY	—TEMP/G—

CONSTRUCTION NOTES:

1. ALL EXISTING CUSTOMERS MUST REMAIN IN SERVICE AT ALL TIMES.
2. UNLESS SPECIFICALLY NOTED GAS MAIN TO BE INSTALLED AT MINIMUM 36" DEPTH BELOW FINAL GRADE.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE AND NOT NECESSARILY ALL THAT EXIST. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. BASE SURVEY WAS PROVIDED BY TDOT. ONLY THE INFORMATION REGARDING NATURAL GAS MAIN RELOCATION HAS BEEN PROVIDED BY JAMES+ASSOCIATES, INC.
5. CONTRACTOR SHALL BE AWARE THAT THERE MAY BE OTHER CONTRACTORS ONSITE WORKING ON OTHER PORTIONS OF THE PROJECT. CONTRACTORS SHALL COORDINATE AND COOPERATE TO AVOID CONFLICT AND DAMAGE.

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S31	636479.4592	1563806.2357	822.78	211+75.07	39.45′ (RT)
S32	636573.4501	1564032.3999	822.25	209+30.16	40.79′ (RT)
S33	636684.1865	1564271.7042	818.80	206+66.74	52.65′ (RT)
S34	636781.0830	1563689.2167	818.30	184+65.97	50.18′ (LT)

JAMES R. GILLESPIE JR. REGISTERED ENGINEER NO. 102690 STATE OF TENNESSEE

10-31-14

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GREATER DICKSON GAS AUTHORITY

UTILITY LAYOUT

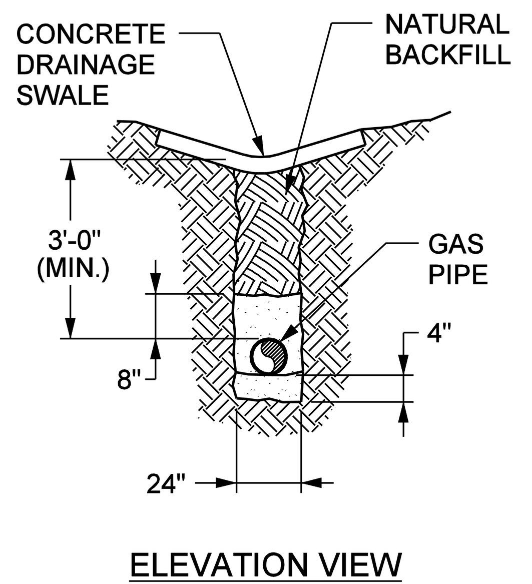
INTERSECTION NO. 16

SCALE: 1″= 50′

$$$$SYTIME$$$$$
$$$$DGNSPEC$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-16

DICKSON COUNTY



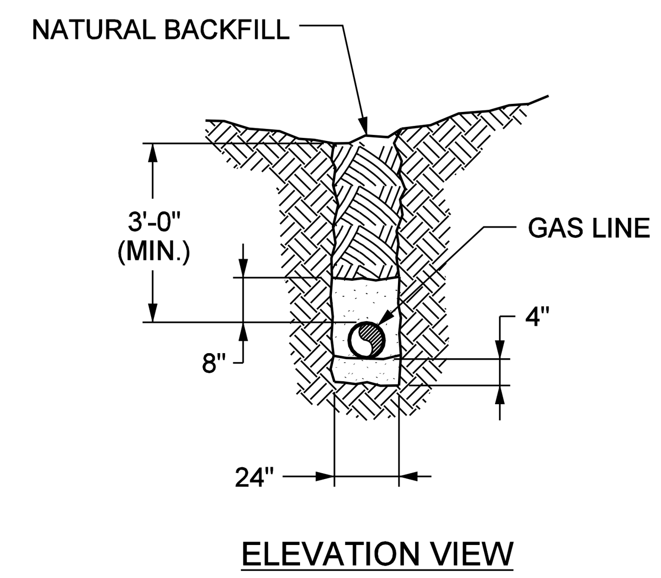
NOTE:

1. MINIMUM DEPTH SHALL BE 46". MINIMUM DEPTH SHALL BE MEASURED FROM THE LOWEST SIDE OF THE DITCH. MIN. OF 36" COVER OVER PIPE.
2. IN CONSOLIDATED ROCK THE MINIMUM DEPTH MAY BE 32". MIN. OF 22" COVER OVER PIPE.
3. 4" OF DIRT, LIMESTONE DUST OR SAND SHALL BE PLACED IN THE TRENCH AND COMPACTED PRIOR TO LOWERING IN THE PIPE.
4. AFTER THE PIPE HAS BEEN LOWERED IN THE TRENCH AND INSPECTED, CONTRACTOR SHALL PROVIDE COMPACTED DIRT, LIMESTONE DUST OR SAND AROUND THE PIPE AND 8" OVER THE PIPE BEFORE BACKFILLING THE TRENCH.

PIPE TRENCH UNDER DITCH DETAIL

NOT TO SCALE

1



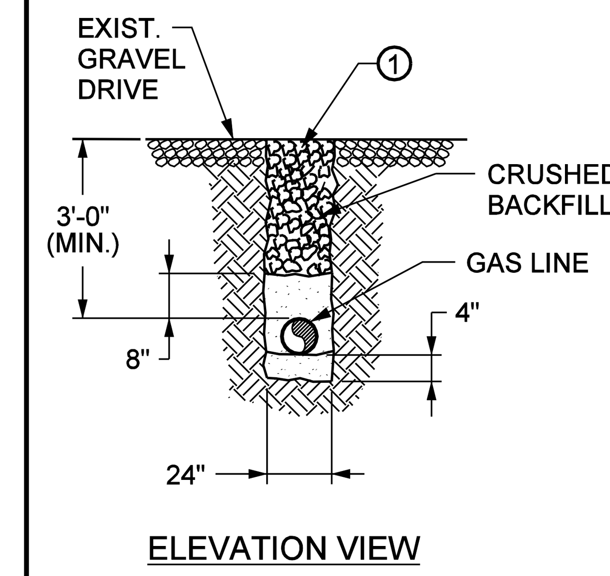
NOTE:

1. MINIMUM DEPTH SHALL BE 46". MINIMUM DEPTH SHALL BE MEASURED FROM THE LOWEST SIDE OF THE DITCH. MIN. OF 36" COVER OVER PIPE.
2. IN CONSOLIDATED ROCK THE MINIMUM DEPTH MAY BE 40". MIN. OF 30" COVER OVER PIPE.
3. 4" OF DIRT, LIMESTONE DUST OR SAND SHALL BE PLACED IN THE TRENCH AND COMPACTED PRIOR TO LOWERING IN THE PIPE.
4. AFTER THE PIPE HAS BEEN LOWERED IN THE TRENCH AND INSPECTED, CONTRACTOR SHALL PROVIDE COMPACTED DIRT, LIMESTONE DUST OR SAND AROUND THE PIPE AND 8" OVER THE PIPE BEFORE BACKFILLING THE TRENCH.

PIPE TRENCH DETAIL

NOT TO SCALE

2



(1) MINERAL AGGREGATE BASE (THICKNESS VARIES) 303-01 MINERAL AGGREGATE TYPE "A" BASE, GRADING "D"

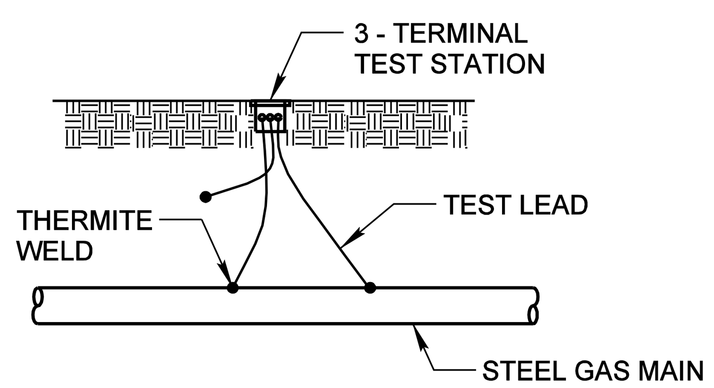
NOTES:

1. MINIMUM DEPTH SHALL BE 36". MINIMUM DEPTH SHALL BE MEASURED FROM THE LOWEST SIDE OF THE DITCH.
2. 4" OF DIRT, LIMESTONE DUST OR SAND SHALL BE PLACED IN THE TRENCH AND COMPACTED PRIOR TO LOWERING IN THE PIPE.
3. AFTER THE PIPE HAS BEEN LOWERED IN THE TRENCH AND INSPECTED, CONTRACTOR SHALL PROVIDE COMPACTED DIRT, LIMESTONE DUST OR SAND AROUND THE PIPE AND 8" OVER THE PIPE BEFORE BACKFILLING THE TRENCH.

GRAVEL DRIVE TRENCH DETAIL

NOT TO SCALE

3



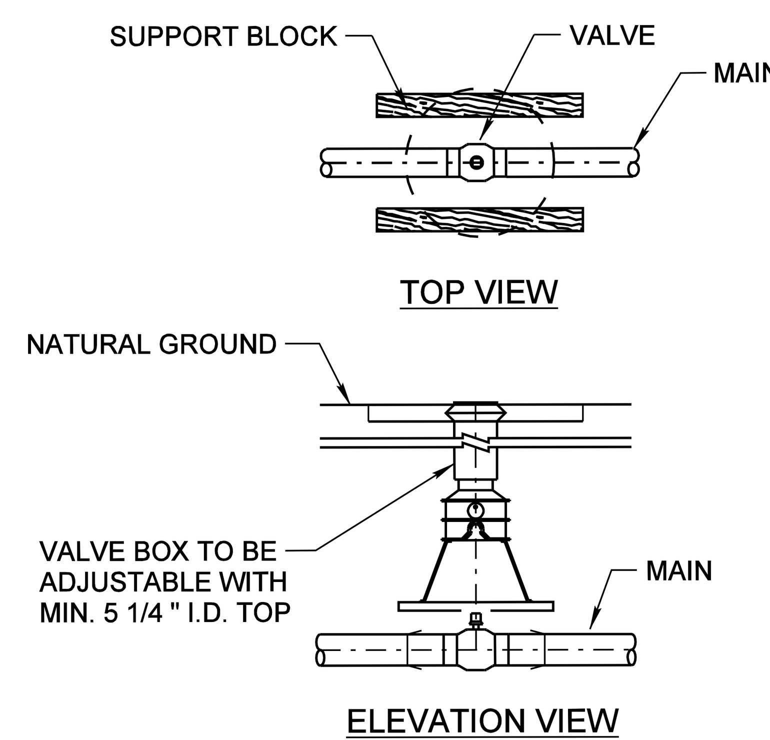
NOTES:

1. 3 - TERMINALTEST STATION (FLUSH MOUNTED).
2. WIRES TO BE THERMITE WELDED & WELD COATED.
3. 10 GAGE WIRE.

3 - TERMINAL TEST STATION (FLUSH MOUNTED)

NOT TO SCALE

4



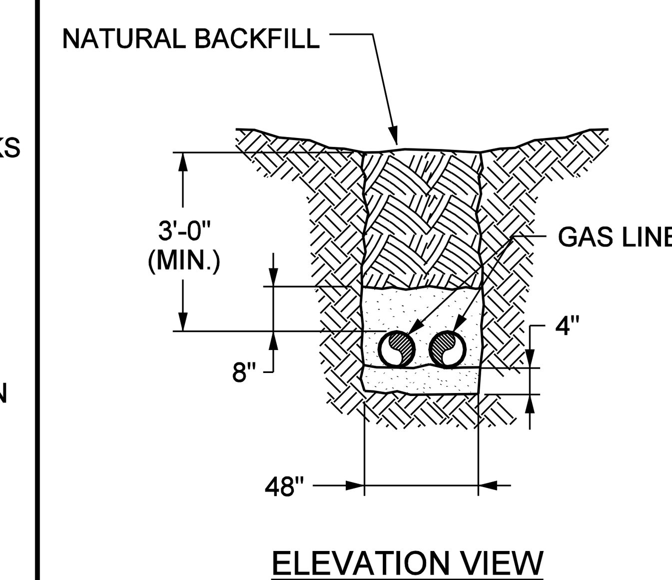
NOTES:

1. COMPACT FILL
2. LAY BRICKS OR CREOSOTED WOODEN SUPPORT BLOCKS ASTRIDE VALVE, TAMP INTO PLACE.
3. PLACE VALVE BOX BASE ON SUPPORT BLOCKS TAKING CARE NOT TO CONTACT MAIN OR VALVE. ENSURE THAT THE ENTIRE WEIGHT OF BOX IS BORNE BY SUPPORT BLOCKS.
4. SPRAY INSIDE OF VALVE BOX COVER AND TOP SECTION WITH YELLOW PAINT FOR INDENTIFICATION. TOP TO BE MARKED "GAS".
5. 2' X 2' X 6" CONCRETE PAD POURED AROUND TOP OF BOX.

VALVE BOX DETAIL

NOT TO SCALE

5



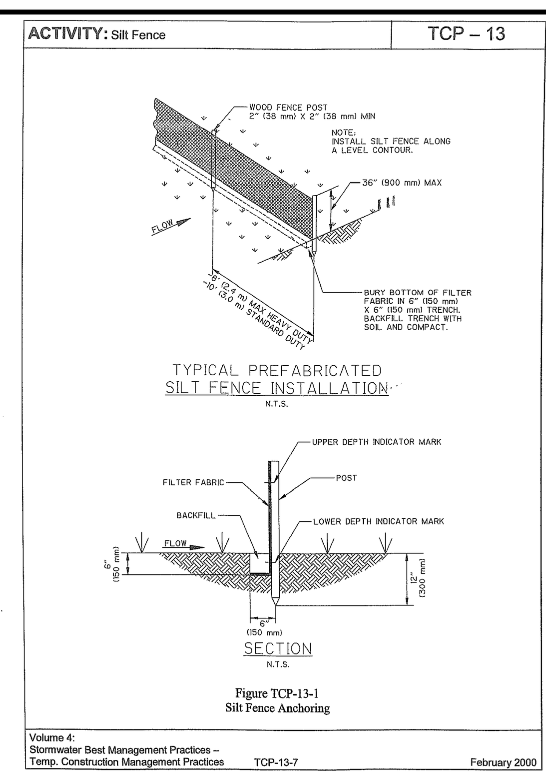
NOTE:

1. MINIMUM DEPTH SHALL BE 46". MINIMUM DEPTH SHALL BE MEASURED FROM THE LOWEST SIDE OF THE DITCH. MIN. OF 36" COVER OVER PIPE.
2. IN CONSOLIDATED ROCK THE MINIMUM DEPTH MAY BE 40". MIN. OF 30" COVER OVER PIPE.
3. 4" OF DIRT, LIMESTONE DUST OR SAND SHALL BE PLACED IN THE TRENCH AND COMPACTED PRIOR TO LOWERING IN THE PIPE.
4. AFTER THE PIPE HAS BEEN LOWERED IN THE TRENCH AND INSPECTED, CONTRACTOR SHALL PROVIDE COMPACTED DIRT, LIMESTONE DUST OR SAND AROUND THE PIPE AND 8" OVER THE PIPE BEFORE BACKFILLING THE TRENCH.

PIPE TRENCH DETAIL

NOT TO SCALE

6



ACTIVITY: Silt Fence | TCP – 13

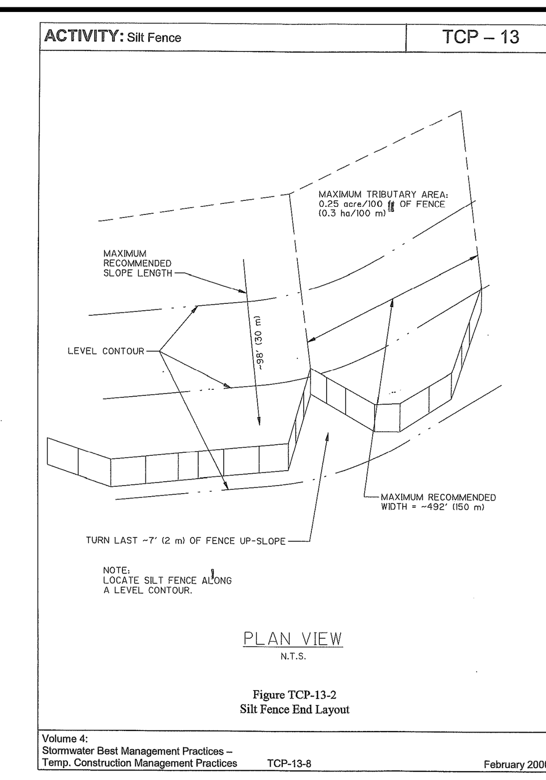
Figure TCP-13-1
Silt Fence Anchoring

Volume 4:
Stormwater Best Management Practices –
Temp. Construction Management Practices TCP-13-7 February 2000

SILT FENCE ANCHORING DETAIL

NOT TO SCALE

7



ACTIVITY: Silt Fence | TCP – 13

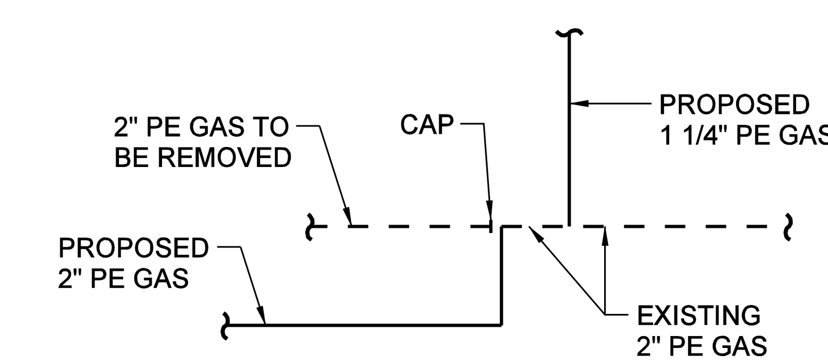
Figure TCP-13-2
Silt Fence End Layout

Volume 4:
Stormwater Best Management Practices –
Temp. Construction Management Practices TCP-13-8 February 2000

SILT FENCE END LAYOUT

NOT TO SCALE

8



RECONNECTION - SKYLINE CIRCLE

(STA. 23+00)
NOT TO SCALE

9

10

11

12

10-31-14

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GREATER DICKSON
GAS AUTHORITY

CONSTRUCTION DETAILS

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U2-17

DICKSON COUNTY

REV. 10-31-14: REVISED BORE CROSS-SECTION LENGTHS.

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

JAMES R. GILLESPIE — STATE OF TENNESSEE — NO. 102690

10-31-14

SCALE: 1"= 10' HORIZ. & VERT.

GREATER DICKSON GAS AUTHORITY

NATURAL GAS RELOCATION

CROSS SECTIONS

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-1

DICKSON COUNTY

UTILITIES INDEX

SHEET NAME	SHEET #
ESTIMATED QUANTITIES & TITLE PAGE	U3-1
ESTIMATED QUANTITIES	U3-2
GENERAL	U3-3
ELECTRIC & FIBER DRAWINGS	
INTERSECTION 2 -- SR-46 & COLLEGE/US-70	U3-4
INTERSECTION 2 -- COLLEGE STREET	U3-5
INTERSECTION 3 -- SR-46 & E. WALNUT STREET	U3-6
INTERSECTION 5 -- SR-46 & BEASLEY DRIVE	U3-7
INTERSECTION 6 -- SR-46 & LEWIS HOLLOW ROAD	U3-8
INTERSECTION 9 -- SR-46 & OAKMONT DRIVE	U3-9
INTERSECTION 10 -- SR-46 & JACKSON BROTHER WAY	U3-10
INTERSECTION 11 -- SR-46 & POMONA ROAD	U3-11
INTERSECTION 12 -- SR-46 & LIVESTOCK ROAD	U3-12
INTERSECTION 13 -- SR-46 & CHRISTI DRIVE	U3-13
INTERSECTION 14 -- SR-46 & I-40 WEST BOUND RAMP	U3-13
INTERSECTION 15 -- SR-46 & I-40 EAST BOUND RAMP	U3-14
INTERSECTION 16 -- SR-1/US-70 & HENSLEE DRIVE	U3-15
FIBER ROUTE TO INTERSECTION OF SR-46 & HENSLEE DRIVE	U3-16
INTERSECTION OF SR-46 & HENSLEE DRIVE FIBER ROUTE	U3-17

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	% Utility Betterment
790-02.03	POLE 35FT CLASS 4 WOOD	EACH		2	0.00%
790-02.07	POLE 35FT CLASS 2 METAL	EACH		1	0.00%
790-03.01	POLE 40FT CLASS 2 WOOD	EACH		5	0.00%
790-04.02	POLE 45FT CLASS 2 WOOD	EACH		2	0.00%
790-04.03	POLE 45FT CLASS 3 WOOD	EACH		4	0.00%
790-05.01	POLE 50FT CLASS 1 WOOD	EACH		1	0.00%
790-05.02	POLE 50FT CLASS 2 WOOD	EACH		7	0.00%
790-05.03	POLE 50FT CLASS 3 WOOD	EACH		7	0.00%
790-05.05	POLE 50FT CLASS 1 METAL	EACH		7	0.00%
790-06.02	POLE 55FT CLASS 2 WOOD	EACH		2	0.00%
790-06.03	POLE 55FT CLASS 3 WOOD	EACH		1	0.00%
790-06.05	POLE 55 FT CLASS 1 METAL	EACH		29	0.00%
790-07.05	POLE 60FT CLASS 1 METAL	EACH		3	0.00%
790-25.01	3Ø CROSSARM SGL 15KV	EACH		12	0.00%
790-25.06	3Ø CROSSARM DBL 15KV	EACH		5	0.00%
790-25.08	3Ø CROSSARM SGL LRG COND 15KV	EACH		1	0.00%
790-25.11	3Ø CROSSARM DBL PRIM SUP LRG COND 15KV	EACH		6	0.00%
790-25.15	3Ø VERTICAL 15KV	EACH		9	0.00%
790-25.18	3Ø VERTICAL DEADEND LRG ANG LG COND 15KV	EACH		6	0.00%
790-25.19	3Ø VERTICAL DEADEND 15KV	EACH		3	0.00%
790-25.21	3Ø CROSSARM DEADEND SGL 15KV	EACH		17	0.00%
790-25.24	3Ø CROSSARM DDE LRG COND 15KV	EACH		14	0.00%
790-26.02	3Ø CROSSARM DBL LRG COND 25KV	EACH		9	0.00%
790-26.03	3Ø CROSSARM SGL LRG COND 25KV	EACH		12	0.00%
790-26.26	3Ø CROSSARM DEAD END 25KV	EACH		3	0.00%
790-30.05	SECONDARY RACKS	EACH		65	0.00%
790-30.06	SECONDARY CONDUCTOR 6 AL DUPLEX	LF		992	0.00%
790-30.13	SECONDARY CONDUCTOR 2 AL TRIPLEX	LF		679	0.00%
790-30.22	SECONDARY CONDUCTOR 1/0 AL QPLEX	LF		44	0.00%

MIKE BILLINGSBY
ENGINEERING MANAGER
DICKSON ELECTRIC SYSTEM
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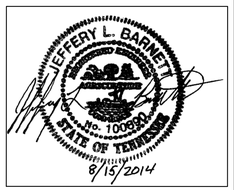
(615) 441-6301
mbillingsby@dicksonelectric.com

JEFF BARNETT - CONSULTANT
POWER & COMMUNICATION SERVICES, INC
P.O. BOX 12376
JACKSON, TN 38308-0139
731.668.6949 OFFICE
731.267.2996 MOBILE
barnett@ieee.org



DICKSON ELECTRIC SYSTEM

ELECTRIC RELOCATION

INTERSECTION NO. 2
STA.391+25 TO STA.402+00

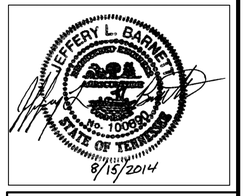
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-2

DICKSON COUNTY

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	% Utility Betterment
790-32.02	DOWN GUY - THROUGH BOLT TYPE HEAVY DUTY	EACH		67	0.00%
790-32.08	OH GUY - THROUGH BOLT TYPE HEAVY DUTY	EACH		18	0.00%
790-32.23	GUY GUARD	EACH		43	0.00%
790-33.04	SCREW TYPE ANCHOR 10,000LB-12,000LB	EACH		2	0.00%
790-33.20	ANCHOR TRIPLE EYE POWER INSTALLED	EACH		49	0.00%
790-40.02	OH COND 2 7/1 ACSR SPARATE	LF		5216	0.00%
790-40.03	OH COND 1/0 6/1 ACSR RAVEN	LF		9305	0.00%
790-40.05	OH COND 3/0 6/1 ACSR PIGEON	LF		2701	0.00%
790-40.42	OH COND 336.4 19 AAC TULIP	LF		30	0.00%
790-41.01	UG PRI COND 2 AL 15KV	LF		150	0.00%
790-41.49	UG SEC COND 4/0 AL TPLX	LF		136	0.00%
790-41.58	UG SEC COND 4/0 AL QPLX	LF		240	0.00%
790-41.60	UG SEC COND 350 AL QPLX	LF		120	0.00%
790-42.04	2IN DIA GALVINIZED METAL PIPE	L.F.		40	0.00%
790-42.06	4IN DIA GALVANIZED METAL PIPE	L.F.		80	0.00%
790-42.10	4IN DIA PVC PIPE	L.F.		456	0.00%
790-42.14	CONDUIT - POLE MTD - 4FT SCH 80 PVC	L.F.		280	0.00%
790-43.10	SPLICE 200A 15KV	EACH		3	0.00%
790-43.11	OUTDOOR TERMINATOR URD 15KV	EACH		7	0.00%
790-43.47	PRIMARY PULLBOX	EACH		1	0.00%
790-46.01	1Ø TRANSFORMER	EACH		14	0.00%
790-46.02	1Ø TRANSFORMER CONV W/POLE MTD FUSE & LA	EACH		3	0.00%
790-49.02	3Ø XFMR BNK POLE MTD W/ FUSE/ARRESTERS	EACH		5	0.00%
790-52.02	5KVA 1Ø OH XFORMER 7.2KV 120/240	EACH		1	0.00%
790-52.03	10KVA 1Ø OH XFORMER 7.2KV 120/240	EACH		2	0.00%
790-52.04	15KVA 1Ø OH XFORMER 7.2KV 120/240	EACH		14	0.00%
790-52.06	25KVA 1Ø OH XFORMER 7.2KV 120/240	EACH		5	0.00%
790-52.09	37.5KVA 1Ø OH XFORMER 7.2KV 120/240	EACH		4	0.00%

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	% Utility Betterment
790-52.11	50KVA 1Ø OH XFORMER 7.2KV 120/240	EACH		2	0.00%
790-58.05	GOLB SWITCH 15KV	EACH		3	0.00%
790-60.01	1Ø FUSE CUTOUT XARM MOUNT 15KV	EACH		3	0.00%
790-64.06	SEC MTG 1Ø 120/240 VOLTS FARM POLE	EACH		1	0.00%
790-65.03	LIGHTNING ARRESTER ARM MTD 9 KV	EACH		15	0.00%
790-65.16	3Ø CAPACITOR ASSEMBLY SWITCHED 15KV	EACH		1	0.00%
790-68.01	POLE GROUND ROD TYPE	EACH		61	0.00%
790-68.07	POLE GROUND FOR AIR BREAK SWITCH	EACH		3	0.00%
790-68.10	MISCELLANEOUS ASSEMBLIES	EACH		9	0.00%
790-69.22	POLE TOP PIN	EACH		8	0.00%
790-69.23	PAIR OF 10IN OR THREE 6IN BELLS	EACH		2	0.00%
790-69.31	STICK PIN	EACH		79	0.00%
790-69.32	ARM PIN	EACH		6	0.00%
790-70.01	STREET LIGHT ON WOOD POLE	EACH		14	0.00%
790-70.06	STREET LIGHT BASE, POWER INSTALLED	EACH		1	0.00%
790-70.10	FLOOD LIGHT	EACH		8	0.00%
790-74.05	24 FIBER (MATERIAL ONLY)	L.F.		9690	0.00%
790-74.19	12-96 FIBER(INSTALLATION ONLY)	L.F.		9690	0.00%
790-74.26	FIBER OPTIC MAINTENANCE LOOP	EACH		12	0.00%
790-98.01	REMOVE WIRE	L.F.		18110	0.00%
790-98.02	REMOVE POLES	EACH		67	0.00%
790-98.03	REMOVE FRAMING/ASSOCIATED APPARATUS	EACH		455	0.00%
798-05.02	FIBER OPTIC CABLE ENCLOSURE	EACH		18	0.00%
798-05.03	FIBER OPTIC CABLE SPLICE	EACH		58	0.00%
798-05.27	COMMUNICATION ASSEMBLY (BOND)	EACH		46	0.00%
798-05.32	COMMUNICATION ASSEMBLY (DDE)	EACH		10	0.00%
798-05.33	COMMUNICATION ASSEMBLY (DE)	EACH		20	0.00%



DICKSON ELECTRIC SYSTEM

ELECTRIC RELOCATION

INTERSECTION NO. 2
STA.391+25 TO STA.402+00

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-3

DICKSON COUNTY

ADDITIONAL SPECIFICATIONS FOR ELECTRIC WORK

All materials shall be listed in the Dickson Electric System's material list which is available from Dickson Electric System's warehouse.

General guidelines of the RUS 830 contract should be followed relating to work procedure, materials and workmanship.

All units shall be constructed by the Dickson Electric System Construction Drawings attached to this project or as found in RUS Bulletin 50-3 - Specifications and Drawings for 12.5/7.2 kV Line Construction and RUS Bulletin 50-6, Specifications and Drawings for Underground Electric Distribution.

All taps off of the main lines shall be made with stirrups and hot-line clamps.

Right-of-way clearing and clean-up will be necessary in some areas for line construction and is to be imbedded in the cost of the units. A distance of 15 feet from center-line of the pole line in each direction is required.

Wooden poles shall be preserved with CCA or penta. No cresote treated poles will be accepted. Steel poles are to be galvanized with 4'-0" of groundline protection. Steel poles will be utilized on SR-46 and SR-1/US-70.

Contractor is responsible for obtaining locates.

Contractor will be required to keep all services energized while work is performed unless prior arrangements are made by the contractor with the customer and approved by the utility on commercial accounts.

Sag charts will be provided by the utilities consultant upon award of project once contractor contacts them.

Fusing charts will be provided by the utility upon award of project once the contractor contacts them.

All old material becomes the property of the contractor once it is removed and should NOT be reused on the new line.

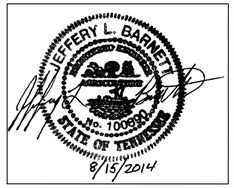
All transformers are to be conventional with externally mounted arrestor, cutout and animal guard as part of the transformer unit.

All crossarms are to be **fiberglass not wood.** Deadend assemblies should have a minimum rated capacity of 8,000 pounds per position.

Post insulators are to be rated a minimum of 22KV with 1500 pound cantilever strength.

Suspension/deadend insulators are to be rated a minimum of 22KV with 10,000 pound tension strength and shall be of a fiberglass/polymer construction.

Fiber optic cable shall be ADSS with material to match existing facilities.



DICKSON ELECTRIC SYSTEM

ELECTRIC RELOCATION

INTERSECTION NO. 2
STA.391+25 TO STA.402+00

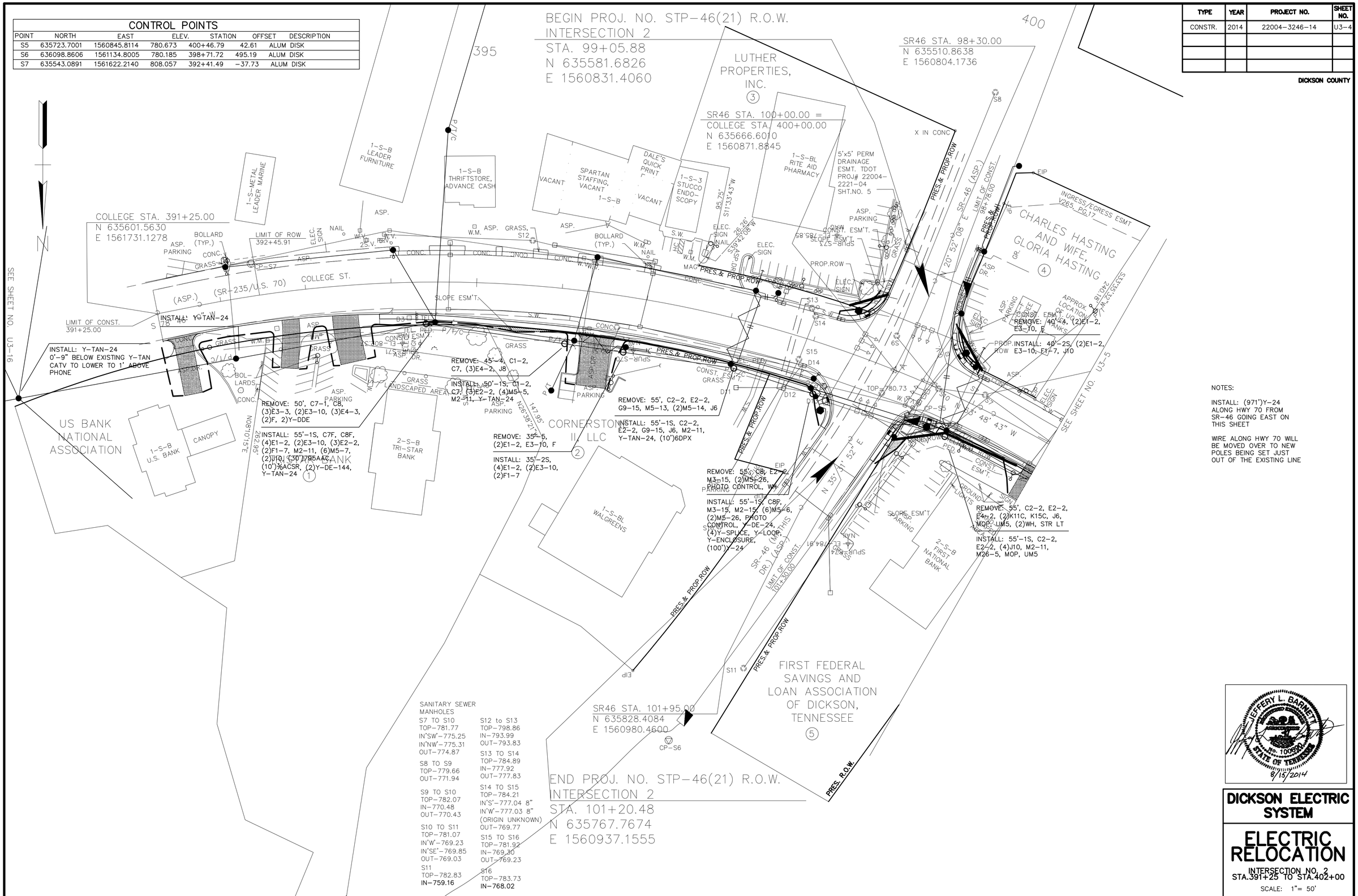
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-4

DICKSON COUNTY

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S5	635723.7001	1560845.8114	780.673	400+46.79	42.61	ALUM DISK
S6	636098.8606	1561134.8005	780.185	398+71.72	495.19	ALUM DISK
S7	635543.0891	1561622.2140	808.057	392+41.49	-37.73	ALUM DISK



NOTES:

INSTALL: (971')Y-24 ALONG HWY 70 FROM SR-46 GOING EAST ON THIS SHEET

WIRE ALONG HWY 70 WILL BE MOVED OVER TO NEW POLES BEING SET JUST OUT OF THE EXISTING LINE

JEFFERY L. BARNETT
No. 100991
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

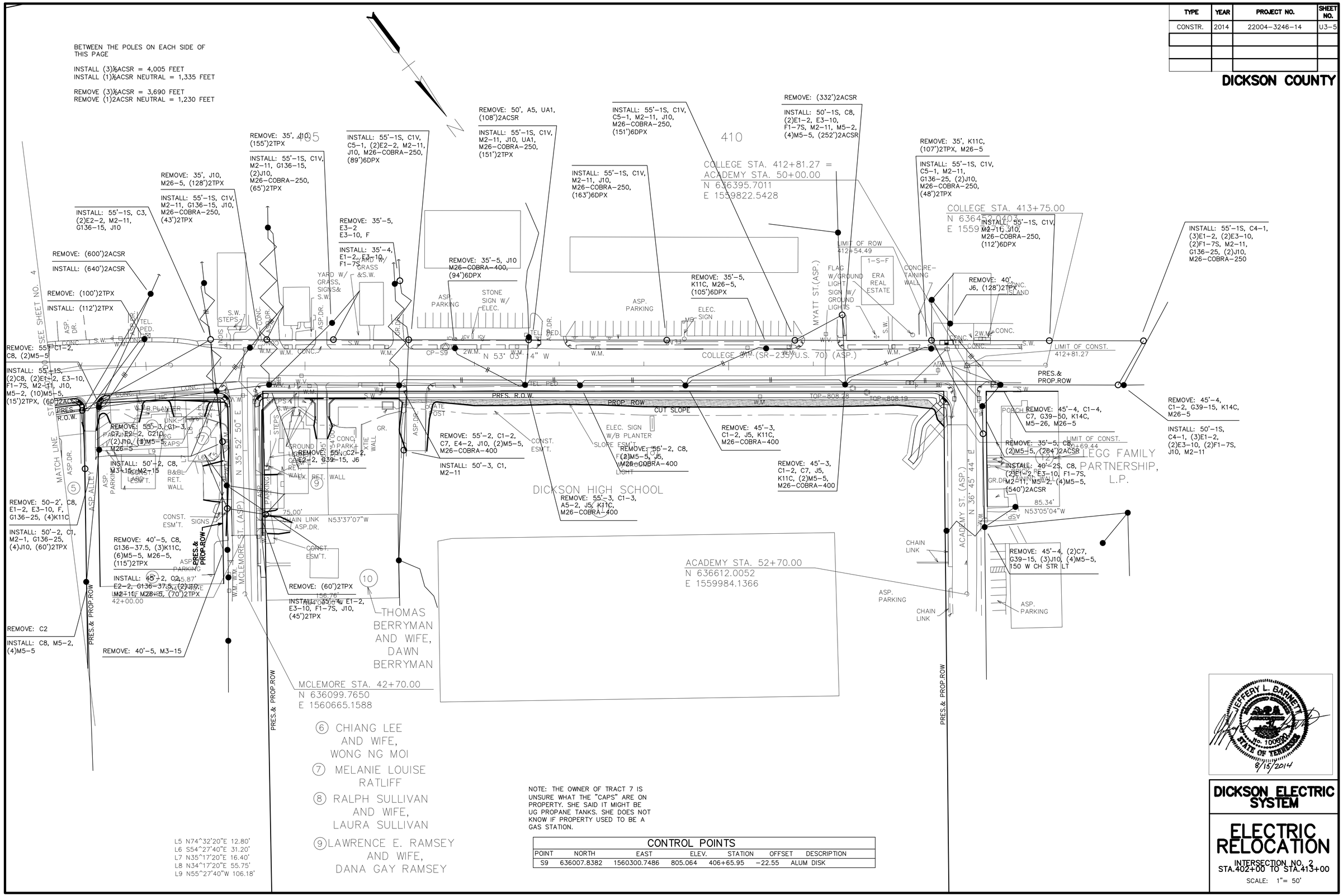
ELECTRIC RELOCATION

INTERSECTION NO. 2
STA.391+25 TO STA.402+00

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-5

DICKSON COUNTY



NOTE: THE OWNER OF TRACT 7 IS UNSURE WHAT THE "CAPS" ARE ON PROPERTY. SHE SAID IT MIGHT BE UG PROPANE TANKS. SHE DOES NOT KNOW IF PROPERTY USED TO BE A GAS STATION.

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S9	636007.8382	1560300.7486	805.064	406+65.95	-22.55	ALUM DISK

JEFFERY L. BARNETT No. 100990 STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

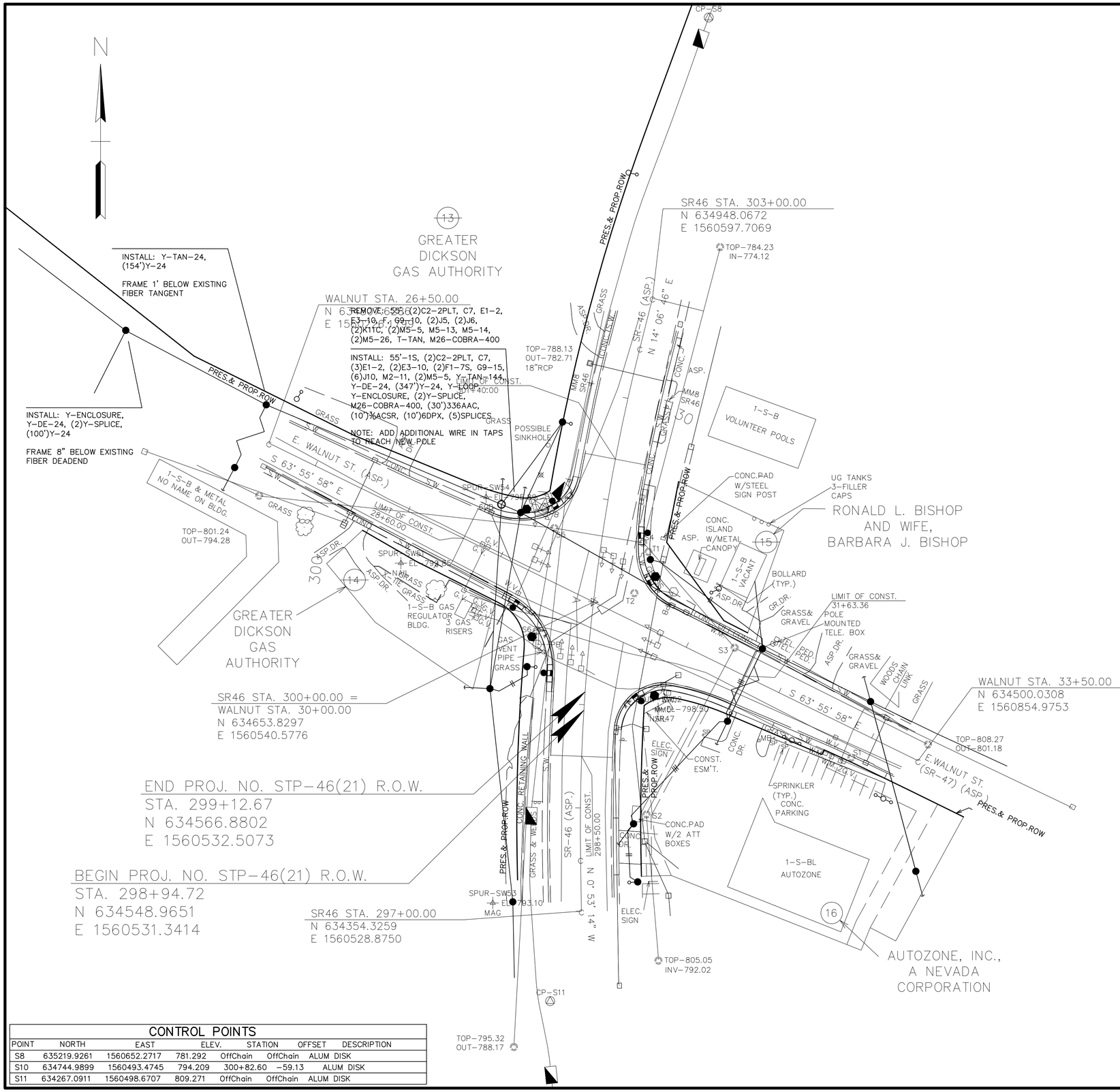
ELECTRIC RELOCATION

INTERSECTION NO. 2
STA.402+00 TO STA.413+00

SCALE: 1"= 50'

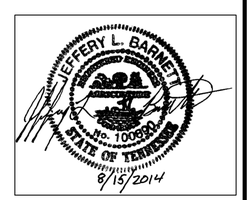
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-6

DICKSON COUNTY



CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S8	635219.9261	1560652.2717	781.292	OffChain	OffChain	ALUM DISK
S10	634744.9899	1560493.4745	794.209	300+82.60	-59.13	ALUM DISK
S11	634267.0911	1560498.6707	809.271	OffChain	OffChain	ALUM DISK



DICKSON ELECTRIC SYSTEM

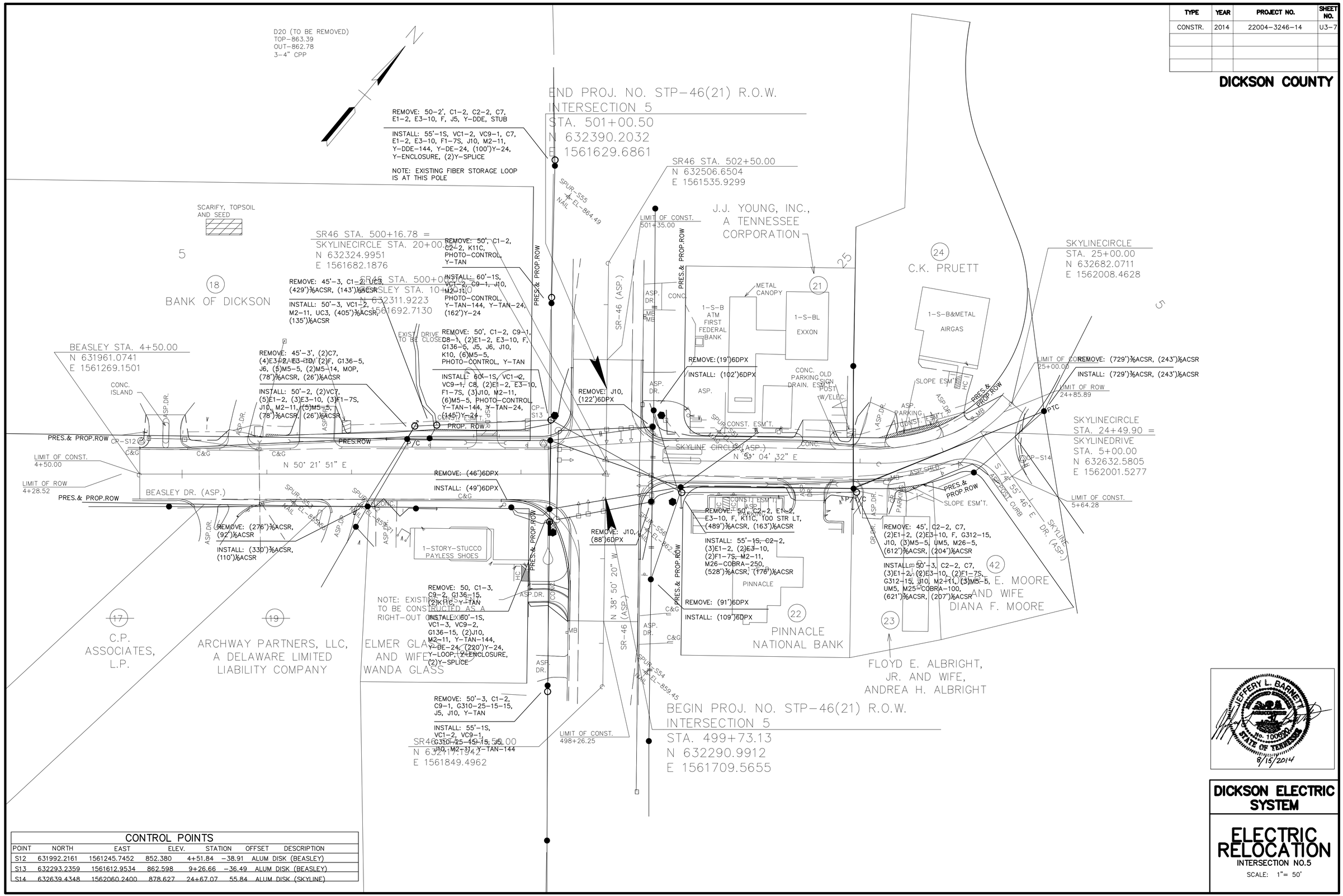
ELECTRIC RELOCATION

INTERSECTION NO.3

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-7

DICKSON COUNTY



CONTROL POINTS						
POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S12	631992.2161	1561245.7452	852.380	4+51.84	-38.91	ALUM DISK (BEASLEY)
S13	632293.2359	1561612.9534	862.598	9+26.66	-36.49	ALUM DISK (BEASLEY)
S14	632639.4348	1562060.2400	878.627	24+67.07	55.84	ALUM DISK (SKYLINE)

DICKSON ELECTRIC SYSTEM

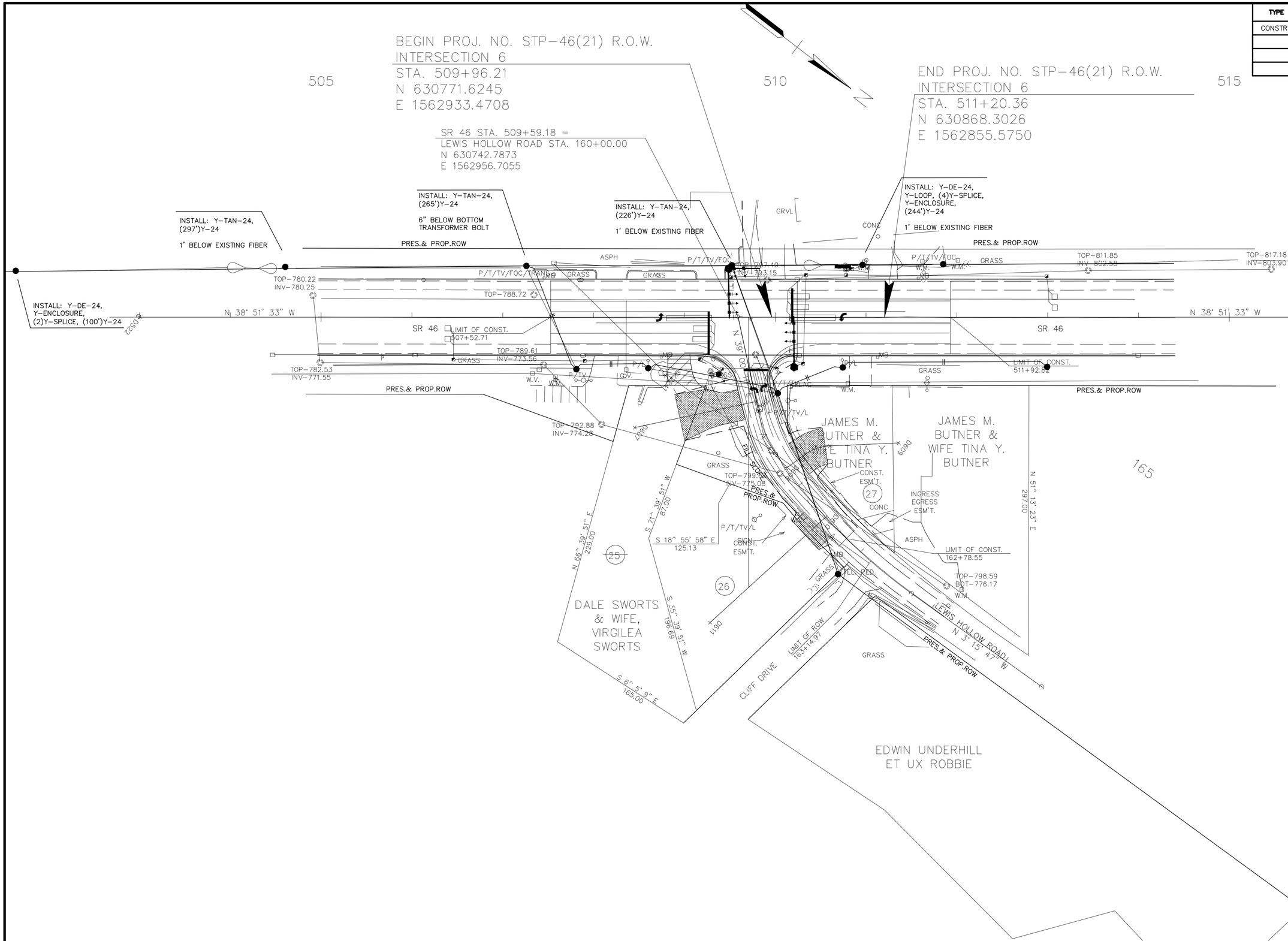
ELECTRIC RELOCATION

INTERSECTION NO.5

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-8

DICKSON COUNTY



JEFFERY L. BARNETT
REGISTERED ENGINEER
No. 100690
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

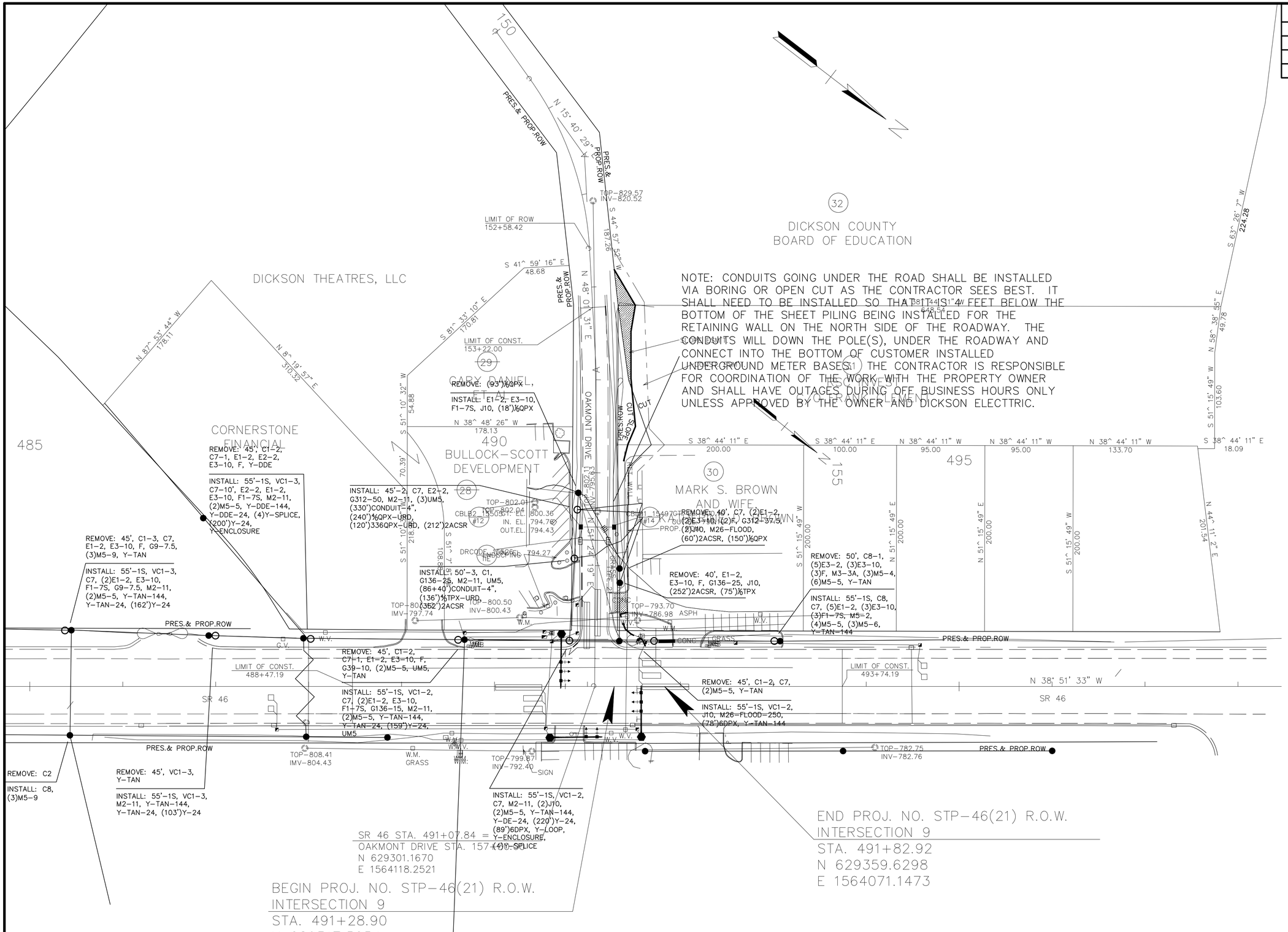
ELECTRIC RELOCATION

INTERSECTION NO.6

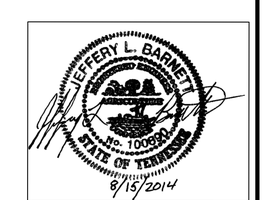
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-9

DICKSON COUNTY



NOTE: CONDUITS GOING UNDER THE ROAD SHALL BE INSTALLED VIA BORING OR OPEN CUT AS THE CONTRACTOR SEES BEST. IT SHALL NEED TO BE INSTALLED SO THAT IT IS 4 FEET BELOW THE BOTTOM OF THE SHEET PILING BEING INSTALLED FOR THE RETAINING WALL ON THE NORTH SIDE OF THE ROADWAY. THE CONDUITS WILL DOWN THE POLE(S), UNDER THE ROADWAY AND CONNECT INTO THE BOTTOM OF CUSTOMER INSTALLED UNDERGROUND METER BASES. 1) THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE WORK WITH THE PROPERTY OWNER AND SHALL HAVE OUTAGES DURING OFF BUSINESS HOURS ONLY UNLESS APPROVED BY THE OWNER AND DICKSON ELECTTRIC.



DICKSON ELECTRIC SYSTEM

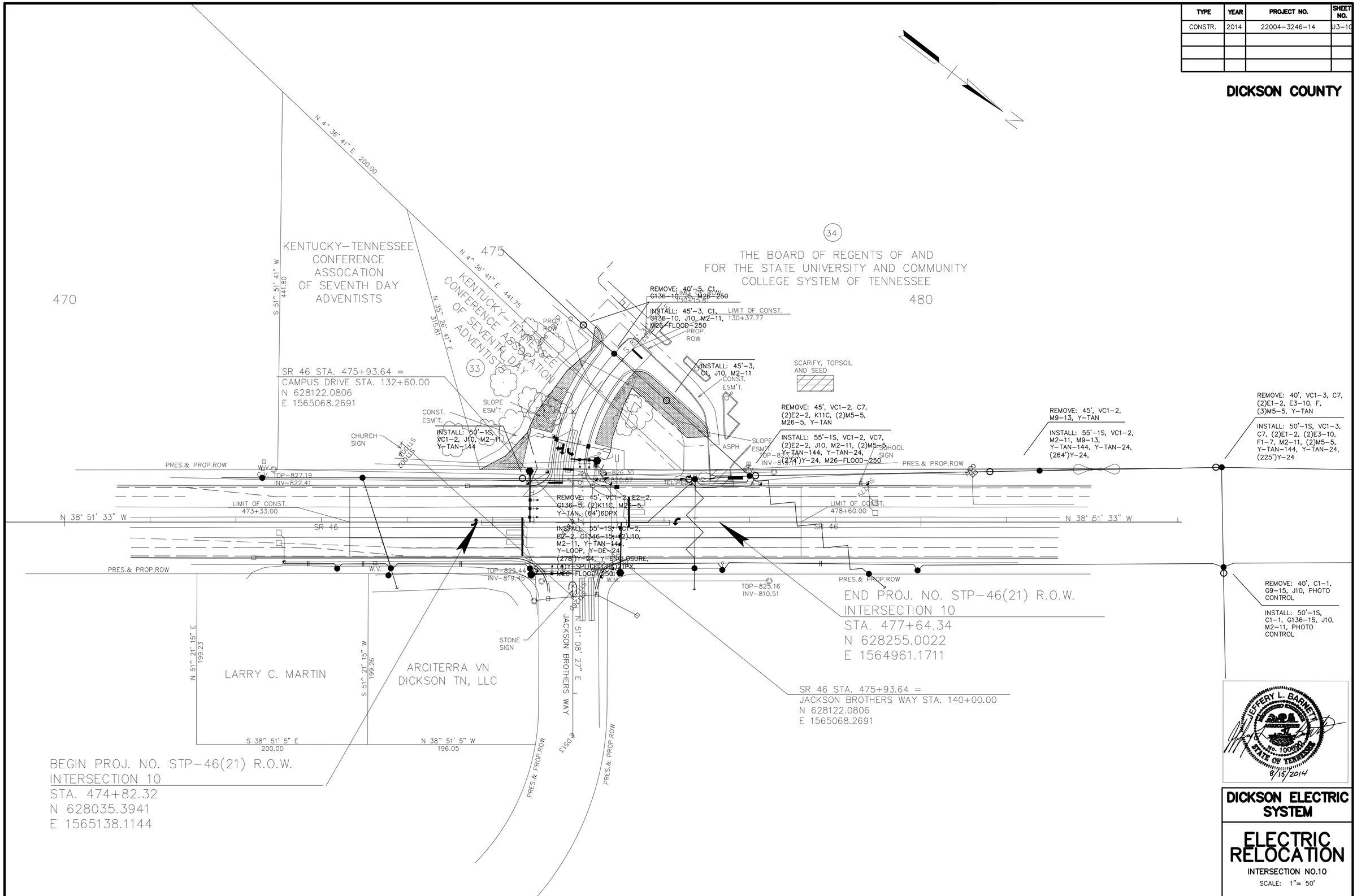
ELECTRIC RELOCATION

INTERSECTION NO.9

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-10

DICKSON COUNTY



DICKSON ELECTRIC SYSTEM

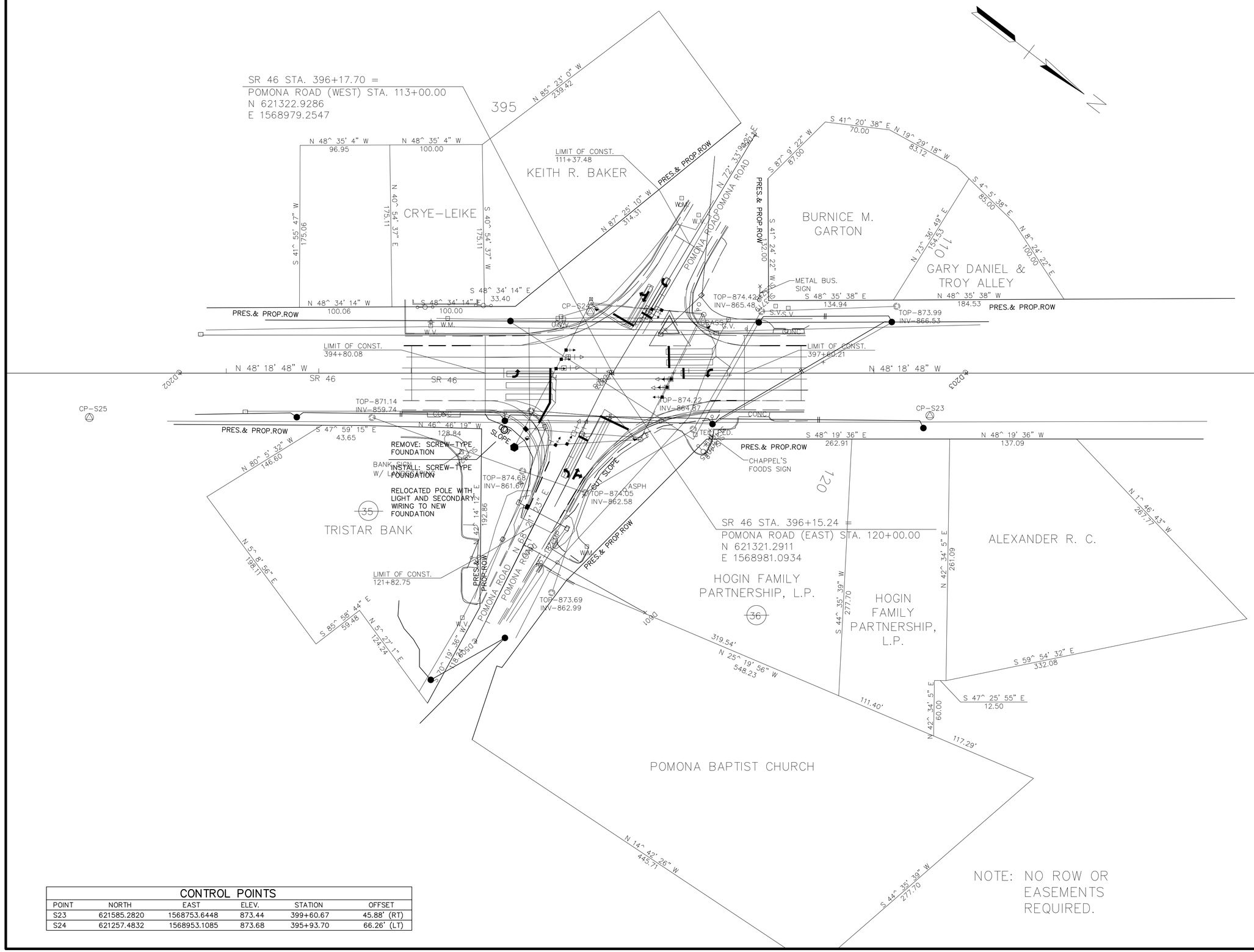
ELECTRIC RELOCATION

INTERSECTION NO.10

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-11

DICKSON COUNTY



NOTE: NO ROW OR EASEMENTS REQUIRED.

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S23	621585.2820	1568753.6448	873.44	399+60.67	45.88' (RT)
S24	621257.4832	1568953.1085	873.68	395+93.70	66.26' (LT)

JEFFERY L. BARNETT
No. 100830
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

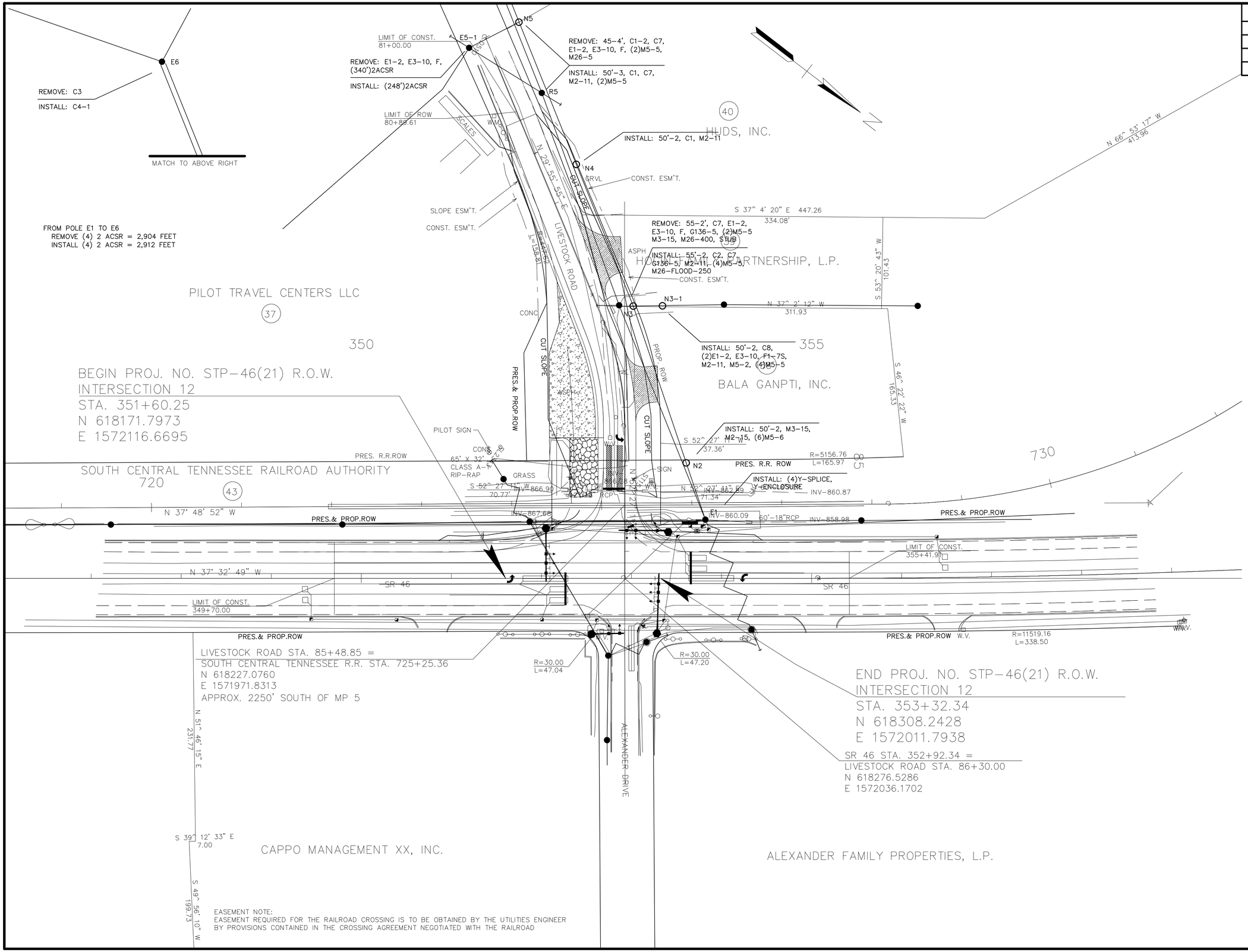
ELECTRIC RELOCATION

INTERSECTION NO.11

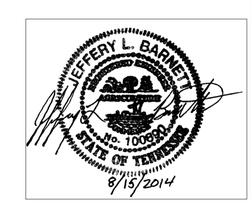
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-12

DICKSON COUNTY



EASEMENT NOTE:
EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD



DICKSON ELECTRIC SYSTEM

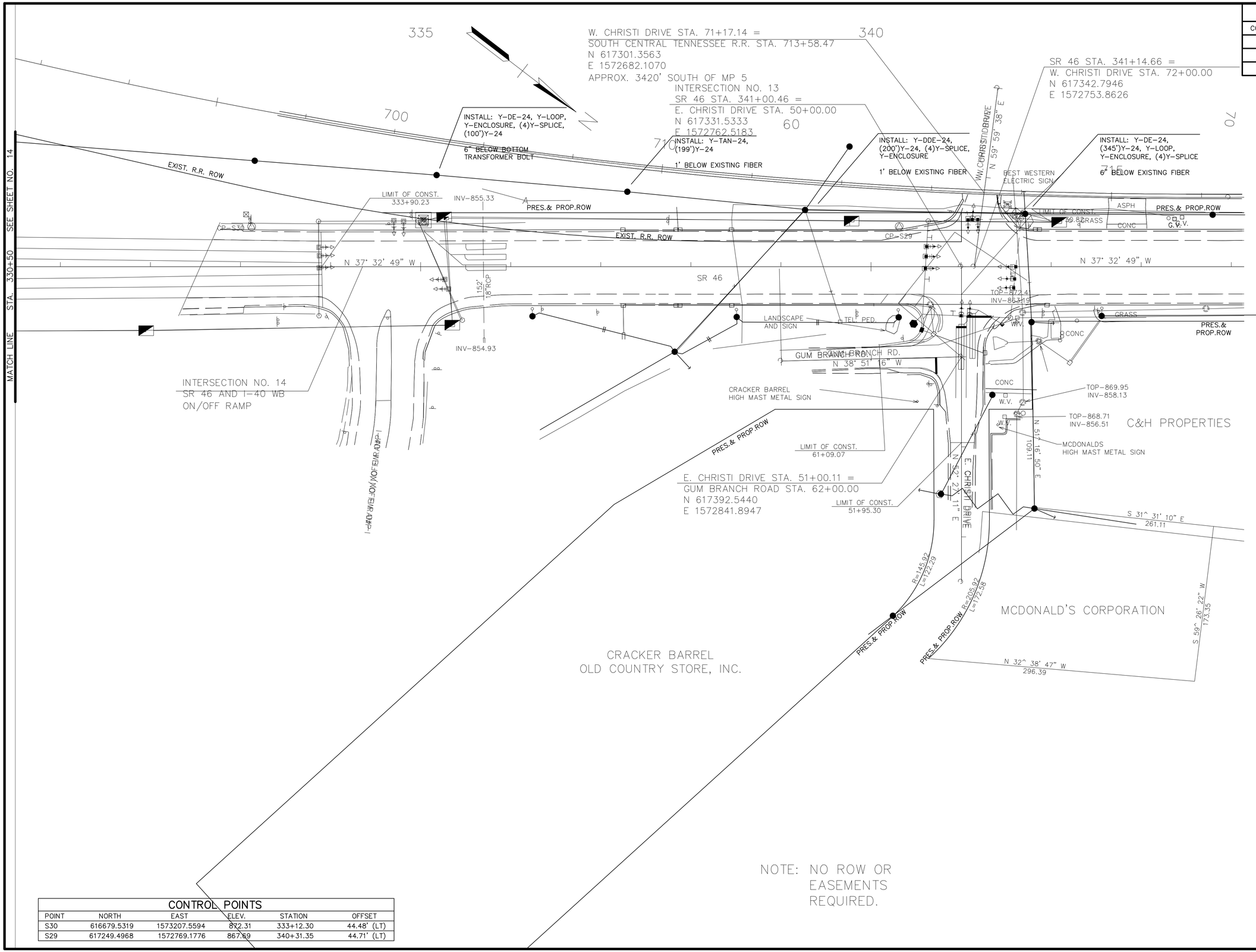
ELECTRIC RELOCATION

INTERSECTION NO.12

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-13

DICKSON COUNTY



NOTE: NO ROW OR EASEMENTS REQUIRED.

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S30	616679.5319	1573207.5594	872.31	333+12.30	44.48' (LT)
S29	617249.4968	1572769.1776	867.69	340+31.35	44.71' (LT)

JEFFERY L. BARNETT
No. 100690
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

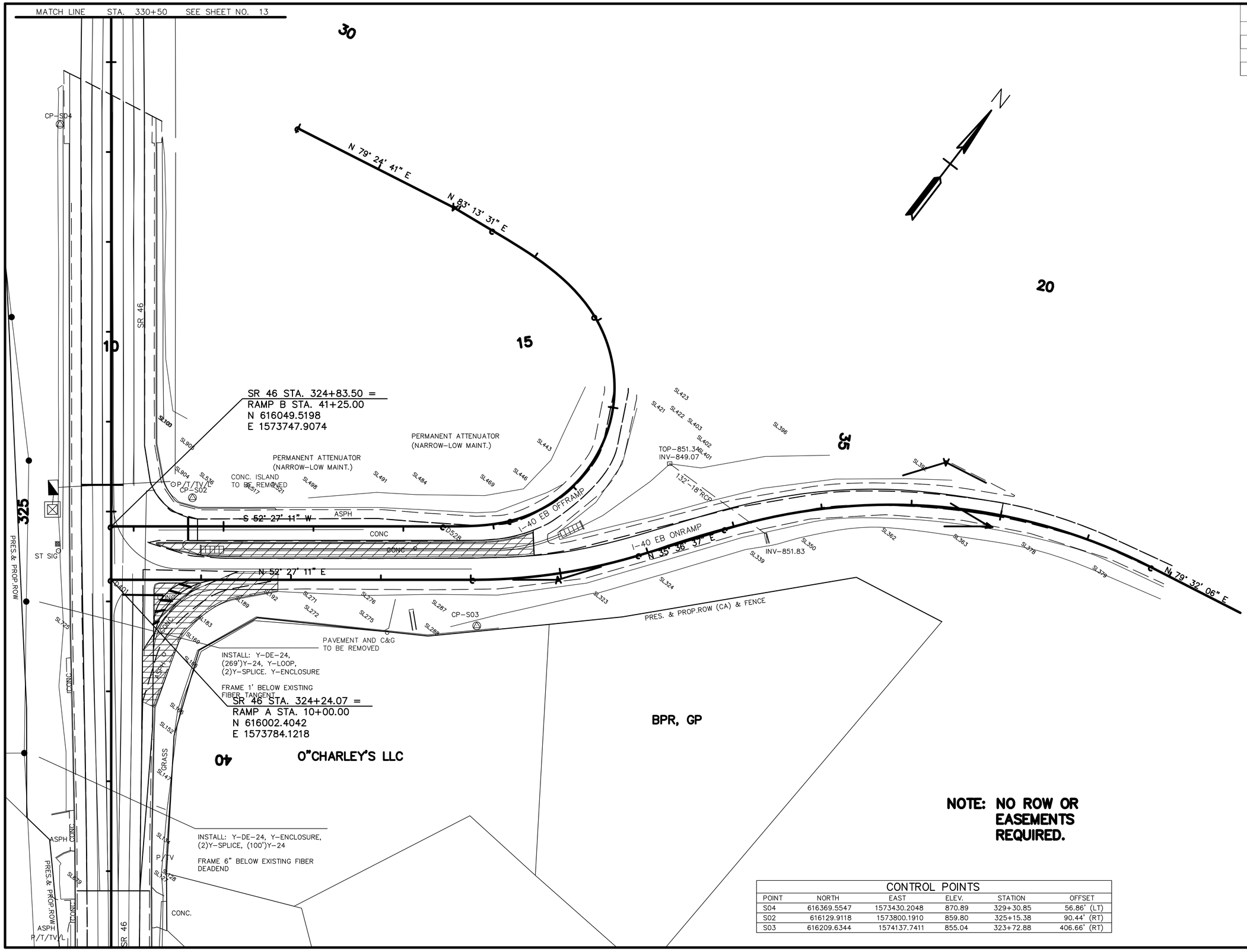
ELECTRIC RELOCATION

INTERSECTION NO.13 & 14

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR	2014	22004-3246-14	U3-14

DICKSON COUNTY



NOTE: NO ROW OR EASEMENTS REQUIRED.

CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S04	616369.5547	1573430.2048	870.89	329+30.85	56.86' (LT)
S02	616129.9118	1573800.1910	859.80	325+15.38	90.44' (RT)
S03	616209.6344	1574137.7411	855.04	323+72.88	406.66' (RT)

JEFFERY L. BARNETT
No. 100690
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

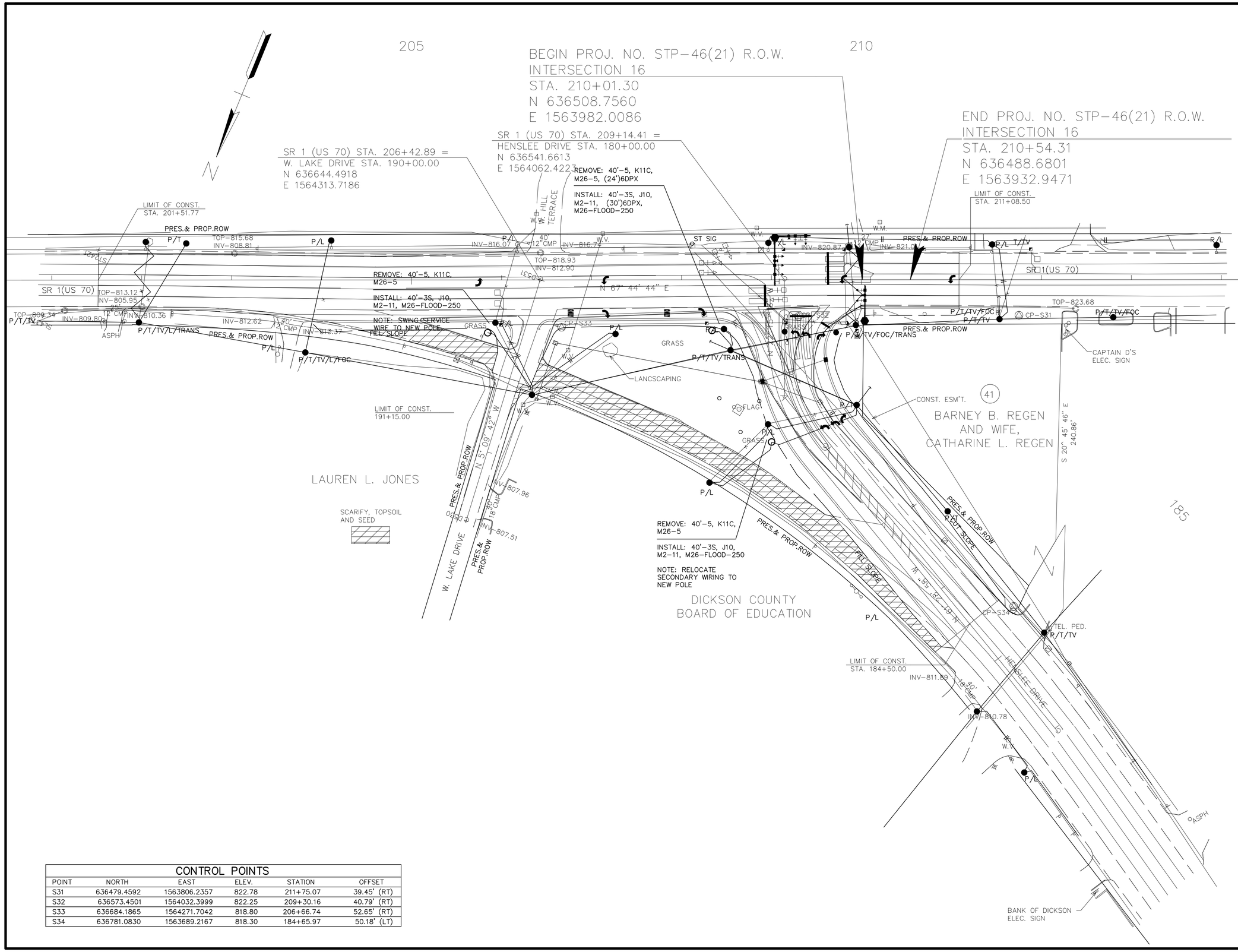
ELECTRIC RELOCATION

INTERSECTION NO.15

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-15

DICKSON COUNTY



CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S31	636479.4592	1563806.2357	822.78	211+75.07	39.45' (RT)
S32	636573.4501	1564032.3999	822.25	209+30.16	40.79' (RT)
S33	636684.1865	1564271.7042	818.80	206+66.74	52.65' (RT)
S34	636781.0830	1563689.2167	818.30	184+65.97	50.18' (LT)

JEFFERY L. BARNETT
No. 100990
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

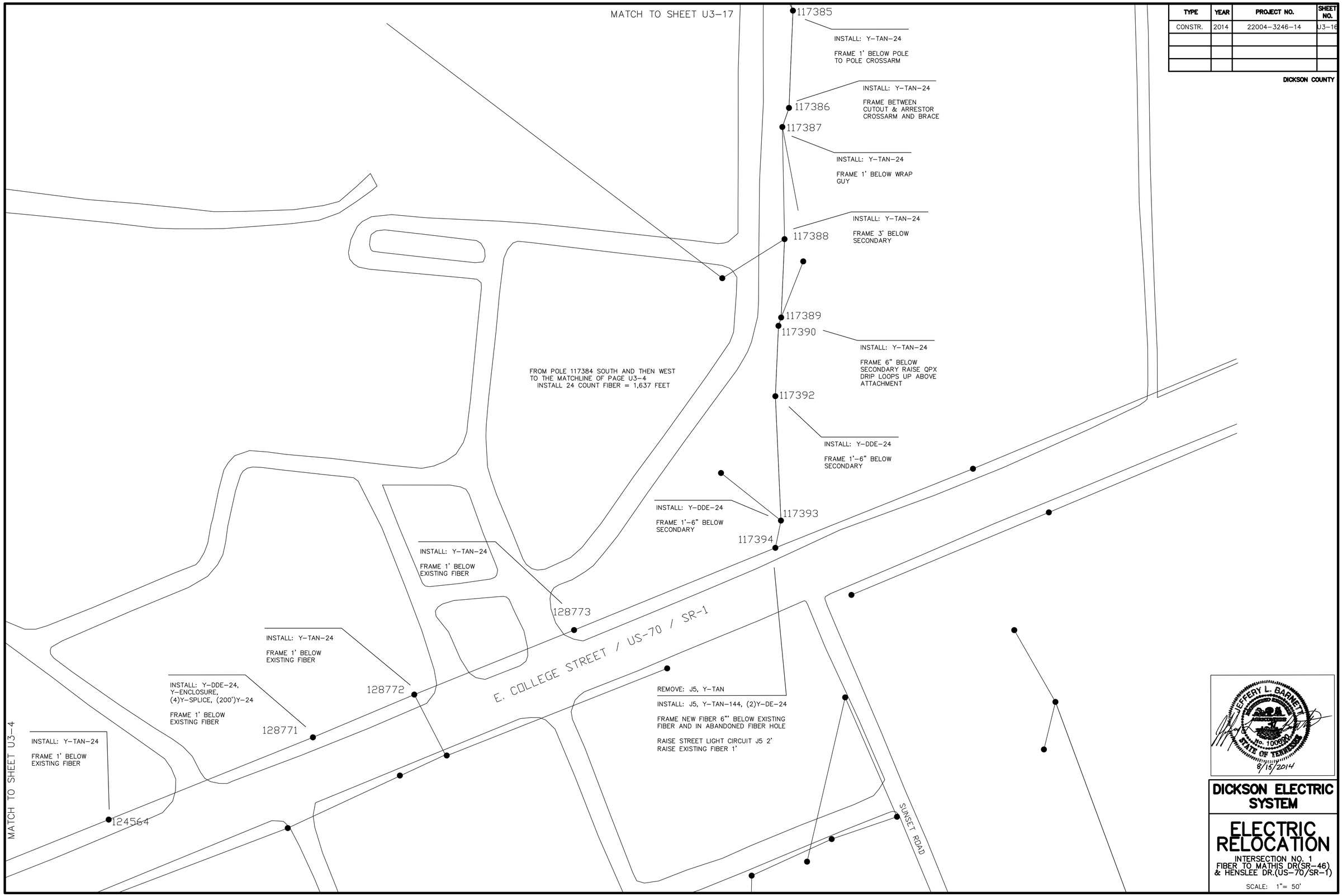
ELECTRIC RELOCATION

INTERSECTION NO.16

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-16

DICKSON COUNTY



JEFFERY L. BARNETT
No. 100931
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

ELECTRIC RELOCATION

INTERSECTION NO. 1
FIBER TO MATHIS DR(SR-46) & HENSLEE DR.(US-70/SR-1)

SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONSTR.	2014	22004-3246-14	U3-17

DICKSON COUNTY

FROM POLE 122634 TO POLE 123582
REMOVE (3)2ACSR = 2,292 FEET
REMOVE (1)4ACSR = 764 FEET
INSTALL (4)1/0ACSR = 3,068 FEET

FROM POLE 117384 TO NEW POLE ON SOUTH SIDE OF HENSLEE DRIVE
INSTALL 24 COUNT FIBER = 1,124 FEET

122634

REMOVE: C2

INSTALL: C8, M5-2, (4)M5-5

NEW URD FIBER IN 215' OF CONDUIT (BY OTHERS)

INSTALL: 50'-1S, C2, (2)E1-2, E3-10, F1-5S, M2-11, Y-DE-24, Y-LOOP, Y-ENCLOSURE, (2)Y-SPLICE, (100')Y-24

HENSLEE DRIVE / US-70 BY-PASS

MATHIS DRIVE / SR-46

124579

REMOVE: 40', C8, (4)E3-2, (2)E3-10, (2)F, G312-37.5, (6)M5-5, (26')½QPX

INSTALL: 50'-2, C1, G312-37.5, (2)J10, E1-2, E3-10, F1-4S, M2-11, (26')½QPX, Y-TAN-24

INSTALL: 45'-3, C1, M2-11, Y-TAN-24

REMOVE: 40', 35', C8, E3-2, G310-PLATFORM, (3)G-50KVA, 4-WIRE-RACK

INSTALL: 55'-2, C1, E1-2, E3-10, F1-4S, G310-50, J10, M2-11, Y-TAN-24

124580
124581

124582

123452

INSTALL: 50'-3, C1, M2-11, Y-TAN-24

INSTALL: (2)Y-DE-24

FRAME 2' & 2'-6" BELOW NEUTRAL

117382

117398

REMOVE: 40', (2)C7-1, (4)E3-2, (2)E3-10, (2)F, (5)M5-5

INSTALL: 55'-3, (2)C7, (4)E1-4, (2)E3-10, (2)F1-5S, M2-11, (3)M5-5, (2)Y-DE-24

REMOVE: 40', C8, (2)E3-2, F, M5-2

INSTALL: 50'-3, C8, (3)E1-2, (2)E3-10, (2)F1-5S, M2-11, M5-2, (4)M5-5, Y-DDE-24, Y-LOOP, (200')Y-24

REMOVE: 40', C1, UC3

INSTALL: 50'-3, C1, M2-11, UC3, Y-TAN-24, (3)UM6-27, (150')2URD-PRIMARY, JUNCTION BOX

INSTALL: Y-TAN-24

FRAME 1' BELOW POLE TO POLE CROSSARM

117384

MATCH TO SHEET U3-16

JEFFERY L. BARNETT
No. 100690
STATE OF TENNESSEE
8/15/2014

DICKSON ELECTRIC SYSTEM

ELECTRIC RELOCATION

INTERSECTION NO. 1
FIBER TO MATHIS DR(SR-46) & HENSLEE DR.(US-70/SR-1)

SCALE: 1"= 50'

Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET TYPICAL SECTIONS PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLE PRESENT LAYOUT R.O.W. DETAILS
4-12	PROPOSED LAYOUTS
13-14	PROFILES PROFILE OF PRIVATE DRIVES CULVERT CROSS-SECTIONS PROPOSED SIGNAL LAYOUT PROPOSED F.O. INTERCONNECT LAYOUT EROSION PREVENTION AND SEDIMENT CONTROL PLAN ROADWAY CROSS-SECTIONS
15-17	WATER DETAILS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

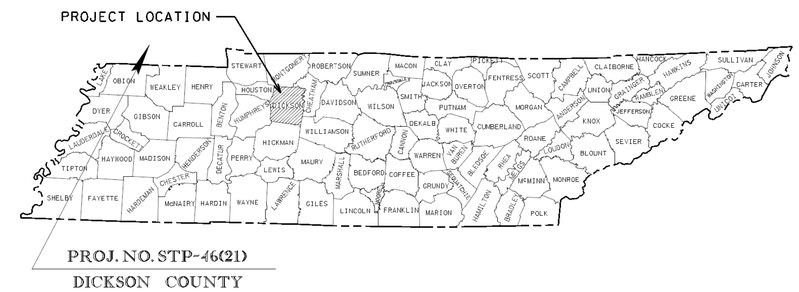
DICKSON COUNTY

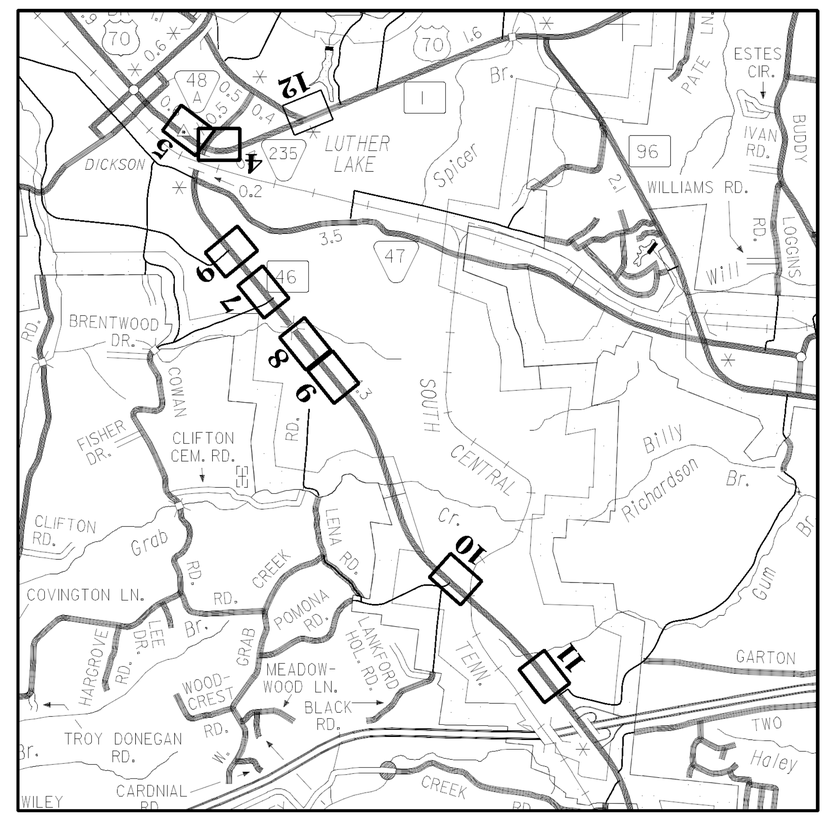
STATE ROUTE 46 UTILITY RELOCATION
FROM I-40 TO SR-1 (US-70, HENSLEE DRIVE), INCLUDING THE INTERSECTION OF SR-1 AT SR-1 (EAST COLLEGE STREET)

UTILITY RELOCATION

STATE HIGHWAY NO. 46 F.A.H.S. NO. NA

TENN.	YEAR	SHEET NO.
	2014	U4-1
FED. AID PROJ. NO.	STP-46(21)	
STATE PROJ. NO.	22004-3246-14	





WATER PLANS

SEALED BY

MICHAEL W. ROGERS REGISTERED ENGINEER DEPARTMENT OF TRANSPORTATION No. 115445 STATE OF TENNESSEE

8/15/14

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 4, 2014 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

DIRECTOR OF PROJECT DEVELOPMENT _____

DESIGNED BY _____

DESIGNER _____ CHECKED BY _____

P.E. NO. _____

PIN NO. _____

ICA Engineering
2550 Irvin Cobb Drive
Paducah, KY 42003
270.444.9691
www.icaeng.com

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

E:_2014 JOBS\14077 Dickson County\Dwgs\WATER\W001.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-2

GENERAL NOTES:

1 CONDUCT ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH APPLICABLE O.S.H.A. REGULATIONS AND OTHER PREVAILING HEALTH & SAFETY STANDARDS.

2 PROVIDE ALL MISCELLANEOUS ITEMS, NOT LISTED BUT REQUIRED FOR CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.

3 VERIFY ALL TENNESSEE DEPARTMENT OF TRANSPORTATION, COUNTY, OR CITY ENCROACHMENT PERMITS REQUIRED FOR THIS PROJECT HAVE BEEN OBTAINED. POST ALL PERMITS ON THE CONSTRUCTION SITE.

4 IMPLEMENT TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, "THE TENNESSEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", WHEN ANY OPERATION ADVERSELY AFFECTS TRAFFIC CONTROL. DEPLOY PROPER LIGHTING, BARRICADING, AND FLAGMEN. FURNISH, ERECT AND MAINTAIN TRAFFIC CONTROL DEVICES AT NO ADDITIONAL COST TO THE OWNER.

5 ALL UTILITIES ARE SHOWN IN THEIR GENERAL LOCATION. PRIOR TO INITIATING CONSTRUCTION, FIELD LOCATE ALL UTILITIES. EXPOSE UTILITIES LOCATED WITHIN THE DISTURBED LIMITS UTILIZING MANUAL EXCAVATION WHERE NEEDED TO AVOID DAMAGE TO THE UTILITY. NOTIFY THE ENGINEER OF CONFLICTS WHICH MAY AFFECT PROPER COMPLETION OF THE WORK. TAKE MEASURES TO PROTECT THE UTILITIES FROM DAMAGE DURING CONSTRUCTION. COORDINATE REPAIRS OF DAMAGED UTILITIES WITH THE OWNERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REQUIRED REPAIR OR REPLACEMENT.

6 IMPLEMENT MEASURES TO PROTECT PROPERTY AND SURVEY MONUMENTS. REPLACE ALL SURVEY MONUMENTS, PROPERTY CORNERS, ETC. DISTURBED BY CONSTRUCTION. ALL PROPERTY CORNERS MUST BE REPLACED BY A PROFESSIONAL SURVEYOR LICENSED TO PRACTICE SURVEYING IN TENNESSEE.

7 RESTORE ALL SOIL AREAS DISTURBED AS A RESULT OF ANY CONSTRUCTION PROCESS TO A CONDITION EQUAL TO OR EXCEEDING PRE-CONSTRUCTION CONDITIONS.

8 FILL DRIVEWAY EXCAVATIONS TO GRADE WITH A TRAFFIC BEARING SURFACE WITHIN 24 HOURS OF EXCAVATION. COORDINATE ACTIVITIES WITH PROPERTY OWNER.

9 RESTORE ROADWAYS AND DRIVEWAYS DAMAGED BY EXCAVATION OR OTHER CONSTRUCTION OPERATIONS TO A CONDITION EQUAL TO OR EXCEEDING PRE-CONSTRUCTION CONDITIONS.

10 DO NOT STORE EXCAVATED MATERIAL IN LOCATIONS THAT BLOCK THE EXISTING STORM DRAINAGE.

11 RESHAPE ALL DITCH LINES DAMAGED DURING CONSTRUCTION TO ORIGINAL LINES AND GRADES OR AS NOTED ON THE GRADING PLAN.

12 REPLACE ALL DRAINAGE PIPES DISTURBED DURING CONSTRUCTION IN-KIND AT NO ADDITIONAL COST TO THE OWNER, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

13 MAINTAIN A MINIMUM 10 FEET HORIZONTAL OR AN 18 INCH VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.

14 REPAIR ANY FENCE, OR PORTION THEREOF, DISTURBED DURING CONSTRUCTION TO A CONDITION EQUAL TO OR EXCEEDING THE PRE-CONSTRUCTION CONDITION.

15 CONDUCT CLEARING, GRUBBING AND CONSTRUCTION ACTIVITIES IN A MANNER MINIMIZING, TO THE EXTENT PRACTICAL, THE DESTRUCTION OF TREES, SHRUBBERY, ETC. THAT MAY BE IN THE PATH OF THE PROPOSED UTILITY.

16 REMOVE ALL DEBRIS, EXCESS MATERIALS, ETC. FROM THE PROJECT SITE AND DISPOSE OF AT AN APPROVED LOCATION AT NO ADDITIONAL COST TO THE OWNER. NO OPEN BURNING WILL BE PERMITTED ON THE SITE.

17 MAINTAIN A CLEAN AND ORDERLY JOB SITE AT ALL TIMES.

18 WITHOUT REGARD TO THE MATERIALS ENCOUNTERED, ALL EXCAVATION ON THIS PROJECT SHALL BE UNCLASSIFIED. ANY REFERENCE TO ROCK, EARTH, OR ANY OTHER MATERIAL ON THE PLAN WHETHER IN NUMBERS, WORDS, LETTERS, OR LINES IS FOR INFORMATION ONLY AND IS NOT TO BE TAKEN AS AN INDICATION OF CLASSIFIED EXCAVATION. UNAUTHORIZED EXCAVATION SHALL BE BACKFILLED AT THE CONTRACTORS EXPENSE WITH COMPACTED EARTH, GRAVEL, OR OTHER MATERIAL AS APPROVED AND DIRECTED BY THE ENGINEER. ANY UNSUITABLE MATERIAL ENCOUNTERED SHALL BE WASTED.

19 "SEED AND PROTECT" ALL DISTURBED AREAS OUTSIDE OF THE T.D.O.T. RIGHT OF WAY IN ACCORDANCE WITH THE T.D.O.T. STANDARD SPECIFICATIONS.

20 WORK HOURS SHALL BE LIMITED TO MONDAY THRU FRIDAY - 6:00 A.M. TO 6:00 P.M. - UNLESS REQUESTED BY THE CONTRACTOR AND APPROVED IN WRITING BY THE OWNER.

21 WORKING ON SITE DURING FEDERALLY OBSERVED HOLIDAYS IS PROHIBITED UNLESS REQUESTED BY THE CONTRACTOR AND APPROVED IN WRITING BY THE OWNER.

22 ALL MATERIALS AND CONSTRUCTION PERFORMANCE SHALL BE ACCORDING TO THE WATER AUTHORITY OF DICKSON Co. (W.A.D.C.) STANDARD SPECIFICATIONS AND PROCEDURES.

23 ALL HYDRANTS SHALL BE INSTALLED ON HYDRANT ANCHORING TEES.

24 ALL HYDRANTS SHALL BE INSTALLED ON SIDE LOT LINES AS NEAR AS POSSIBLE TO FRONT PROPERTY LINES.

25 W.A.D.C. SHALL PRIOR APPROVE THE CONTRACTOR.

26 W.A.D.C. SHALL WITNESS ALL PRESSURE TESTS AND APPROVE COLIFORM SAMPLES TESTED IN W.A.D.C. LABORATORY PRIOR TO ANY CONNECTIONS TO POTABLE MAINS.

27 ALL THRUST BLOCKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

28 TAP OF W.A.D.C. MAIN SHALL BE MADE BY AUTHORIZED WATER PERSONNEL ONLY AFTER ALL TEST HAVE BEEN MADE AND APPROVED BY W.A.D.C.

29 COORDINATE AND SCHEDULE ALL WATER LINE CAPPING WITH W.A.D.C.

30 THRUST RESTRAINT GLANDS SHALL BE USED FOR ALL MECHANICAL JOINT FITTINGS.

31 RETURN ALL SALVAGEABLE MATERIALS (I.E. HYDRANTS, VALVES, ETC.) TO W.A.D.C. YARD UPON REMOVAL.

32 ALL MECHANICAL JOINT FITTINGS TO BE INSTALLED WITH A JOINT RESTRAINT GLAND AND TORQUE NUT.

33 PROPOSED PIPING IS SHOWN IN ITS GENERAL LOCATION. COORDINATE WITH THE ENGINEER ANY MINOR ADJUSTMENTS OF THE LOCATION AND GRADE NECESSARY TO INTEGRATE ALL PROPOSED PIPING WITH EXISTING PIPING.

34 W.A.D.C. MAY REQUIRE WATER LINE SHUT DOWNS FOR TIE-INS AND/OR CUT & CAP OPERATIONS TO BE PERFORMED AT NIGHT BETWEEN THE HOURS OF 10:00p.m. AND 5:00a.m. ANY ADDITIONAL COST FOR THIS WORK WILL BE INCIDENTAL TO THE PROJECT.

35 CONDUCT ALL PRESSURE TEST ACTIVITIES BETWEEN 7:30a.m. AND 1:30p.m. (MONDAY THRU FRIDAY). SCHEDULE TESTS WITH THE W.A.D.C. A MINIMUM OF TWO DAYS ADVANCE NOTICE.

36 MAINTAIN ACCURATE AS-BUILT RECORDS INCLUDING THE LOCATION AND DEPTH OF MAINS REFERENCED TO THE CENTERLINE OF ADJACENT ROADWAYS AT 100 FT. INTERVALS AND AT ALL CHANGES IN DIRECTION. ALL VALVES SHALL BE FIELD REFERENCED TO AT LEAST THREE PERMANENT POINTS. AS-BUILT RECORDS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO CERTIFICATION OF COMPLETION.

37 THE QUANTITY FOR DI FITTINGS INCLUDES FITTINGS, GLANDS AND RESTRAINT DEVICES DESCRIBED IN POUNDS.

38 THE UNIT PRICE FOR RELOCATE/RECONNECT SERVICE ASSEMBLY SHALL INCLUDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR REMOVAL OF EXISTING WATER SERVICE METER ASSEMBLY AND INSTALLING AT NEWLY IDENTIFIED LOCATION.

39 THE UNIT PRICE FOR RESTORE ASPHALT, CLASS A CONCRETE, AND CLASS B CONCRETE, SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT, SETUP AND TRAFFIC CONTROL FOR COMPLETE INSTALLATION.

40 THE UNIT PRICE FOR DIP RESTRAINED JOINT AND SLIP JOINT WATER LINE, AND COPPER SERVICE PIPE SHALL INCLUDE ALL MATERIALS, LABOR, EQUIPMENT FOR COMPLETE INSTALLATION OF PIPE INCLUDING, BUT NOT LIMITED TO, TRAFFIC CONTROL, MATERIALS, EQUIPMENT, EXCAVATION IN BOTH UNCONSOLIDATED AND ROCK, REMOVAL AND REPLACEMENT OF UNSTABLE SOIL, ENVELOPE/BEDDING MATERIAL, BACKFILLING, FLOWABLE FILL, THRUST BLOCKING, CONCRETE DEADMAN, PIPE FUSION, TRACER WIRE, WARNING TAPE, APPURTENANCES, TEMPORAY/PERMANENT SHORING, MAINTAINING THE TRENCH, TESTING FLUSHING, DISINFECTION, BACTERIOLOGICAL SAMPLING, TEMPORARY/PERMANENT SURFACE RESTORATION, AND ANY OTHER LABOR OR MATERIAL REQUIRED TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS.

41 THE UNIT PRICES FOR 18 in AND 20 in STEEL CASING PIPE OPEN CUT METHODS AND BORE/JACK STEEL CASING PIPE SHALL INCLUDE, BUT NOT BE LIMITED TO, CASING PIPE, PIPE SPACERS, CASING END SEALS, FITTINGS, TRACER WIRE, WARNING TAPE, UTILITY LINE MARKERS AND TRAFFIC CONTROL. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM.

42 THE UNIT PRICES FOR CONNECTING TO EXISTING WATER LINE SHALL INCLUDE ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR CONNECTING TO AN EXISTING WATER LINE AS SPECIFIED ON PLANS, INCLUDING TRAFFIC CONTROL.

43 THE UNIT PRICE FOR TAPPING SLEEVES AND VALVES SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, TAPPING SLEEVE, VALVE, VALVE BOX, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, BLOCKING AND RESTRAINT, TAP OF EXISTING LINE, AND TRAFFIC CONTROL.

44 THE UNIT PRICE FOR GATE VALVES AND FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, FITTING, VALVE, VALVE STEM EXTENSION, VALVE BOX AND COVER, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, BLOCKING AS PROVIDED ON THE DETAIL SHEET, AND TRAFFIC CONTROL.

45 THE UNIT PRICE FOR WATER SERVICE METER ASSEMBLY SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT, INCLIUDING, BUT NOT LIMITED TO, MACHINERY, TOOLS OR APPARATUS NECESSARY FOR INSTALLATION OF ASSEMBLIES AS DESCRIBED IN THE PLANS AND SPECS. EXCEPT FOR SERVICE LINE WHICH IS PAID SEPARATELY FOR EACH FOOT INSTALLED.

46 THE UNIT PRICE FOR COPPER SERVICE PIPE SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT, FOR COMPLETE INSTALLATION OF SERVICE LINE AND CASING FOR SERVICE LINE ON LONG SIDE AND SHORT SIDE OF THE MAIN.

47 THE UNIT PRICE FOR REMOVE FIRE HYDRANT SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT FOR REMOVAL OF ITEM.

LEGEND:

- 8" SA — PROP. SANITARY SEWER
- 10" FMS — PROP. FORCE MAIN
- 12" W — PROP. WATER LINE
- 2" G — PROP. GAS LINE
- 18" ST — PROP. STORM DRAINAGE
- 8" SA — EXIST. SANITARY SEWER
- 10" FMS — EXIST. FORCE MAIN
- 8" W — EXIST. WATER LINE
- 2" G — EXIST. GAS LINE
- PROP. M.H. A-13 / STA. 29+04.18
- EXIST. M.H. A-14 / STA. 30+92.21
- PROP. STORM INLET

WATER PLANS

SEALED BY

MICHAEL W. ROGERS REGISTERED ENGINEER AGRICULTURE & COMMERCE No. 115449 STATE OF TENNESSEE

8/13/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ICA Engineering
2550 Irvin Cobb Drive
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WATER NOTES

NTS

$$$SYTIME$$$$$$
$$$DGNSPEC$$$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-3

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES - WATER

TDOT ITEM #	DESCRIPTION	UNIT	U4-4	U4-5	U4-6	U4-7	U4-8	U4-9	U4-10	U4-11	U4-12	TOTAL	UNIT PRICE NOTES
	MATERIAL AND INSTALLATION BY THE CONTRACTOR												
795-01.03	6IN DIP RESTRAINED JOINT WATER LINE	L.F.		135							120	255	Sht.U4-2, Note 40
795-01.04	6IN DIP SLIP JOINT WATER LINE	L.F.	6			4				432	72	514	Sht.U4-2, Note 40
795-01.05	8IN DIP RESTRAINED JOINT WATER LINE	L.F.		185			372					557	Sht.U4-2, Note 40
795-01.06	8IN DIP SLIP JOINT WATER LINE	L.F.			332							332	Sht.U4-2, Note 40
795-01.07	10IN DIP RESTRAINED JOINT WATER LINE	L.F.	122					123	125			370	Sht.U4-2, Note 40
795-01.08	10IN DIP SLIP JOINT WATER LINE	L.F.	12					100	69			181	Sht.U4-2, Note 40
795-01.09	12IN DIP RESTRAINED JOINT WATER LINE	L.F.	160		86	65						311	Sht.U4-2, Note 40
795-01.10	12IN DIP SLIP JOINT WATER LINE	L.F.	603	196	14	88						901	Sht.U4-2, Note 40
795-05.63	BORE/JACK 12IN STEEL CASING PIPE-UNCON.	L.F.									95	95	Sht.U4-2, Note 41
795-05.66	BORE/JACK 18IN STEEL CASING PIPE-UNCON.	L.F.	95						100			195	Sht.U4-2, Note 41
795-05.67	BORE/JACK 20IN STEEL CASING PIPE-UNCON.	L.F.	120		70							190	Sht.U4-2, Note 41
795-15.04	18IN STEEL CASING PIPE OPEN CUT METHOD	L.F.						90				90	Sht.U4-2, Note 41
795-15.05	20IN STEEL CASING PIPE OPEN CUT METHOD	L.F.				45						45	Sht.U4-2, Note 41
795-07.03	6IN X 6IN TAPPING SLEEVE AND VALVE	EACH	1			1				1	1	4	Sht.U4-2, Note 43
795-07.05	8IN X 6IN TAPPING SLEEVE AND VALVE	EACH									1	1	Sht.U4-2, Note 43
795-07.06	8IN X 8IN TAPPING SLEEVE AND VALVE	EACH		1	1		2					4	Sht.U4-2, Note 43
795-07.08	10IN X 6IN TAPPING SLEEVE AND VALVE	EACH								1		1	Sht.U4-2, Note 43
795-07.10	10IN X 10IN TAPPING SLEEVE AND VALVE	EACH	1					2	2			5	Sht.U4-2, Note 43
795-07.15	12IN X 12IN TAPPING SLEEVE AND VALVE	EACH	1		2	2						5	Sht.U4-2, Note 43
795-08.09	12IN GATE VALVE ASSEMBLY	EACH	3	1								4	Sht.U4-2, Note 44
795-09.01	3/4IN WATER SERVICE METER ASSEMBLY	EACH	1	6	5							12	Sht.U4-2, Note 45
795-09.09	RELOCATE/RECONNECT SERVICE ASSEMBLY	EACH	1	7	5	1						14	Sht.U4-2, Note 38
795-09.28	3/4IN COPPER SERVICE PIPE	L.F.	6	175	170	75						426	Sht.U4-2, Note 40
795-11.02	FIRE HYDRANT ASSEMBLY	EACH	1	1	1				1	1	1	6	Sht.U4-2, Note 44
795-12.01	REMOVE FIRE HYDRANT	EACH	1	1					1	1	1	5	Sht.U4-2, Note 47
795-13.01	DI FITTINGS	LBS	2497	1163	1493	1570	341	940	591	275	298	9,168	Sht.U4-2, Note 37
795-06.04	CONNECT TO 6IN WATER LINE	EACH				1				1	1	3	Sht.U4-2, Note 42
795-06.05	CONNECT TO 8IN WATER LINE	EACH		1			1					2	Sht.U4-2, Note 42
795-06.06	CONNECT TO 10IN WATER LINE	EACH						2	1	1		4	Sht.U4-2, Note 42
795-06.07	CONNECT TO 12IN WATER LINE	EACH	1			2						3	Sht.U4-2, Note 42
795-14.01	CLASS A CONCRETE	C.Y.	33									33	Sht.U4-2, Note 39
795-14.02	CLASS B CONCRETE	C.Y.	12.6	5.1	9.2	11.9	2.3	6.9	4.9	2.3	1.7	56.9	Sht.U4-2, Note 39
795-14.08	RESTORE ASPHALT	S.Y.	32	263	41	16				61		413	Sht.U4-2, Note 39

WATER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
No. 116245
STATE OF TENNESSEE
Michael W. Rogers 8/15/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER QUANTITIES

NTS

ICA Engineering
2550 Irvin Cobb Drive
Paducah, KY 42003
270.444.9691
www.icaeng.com

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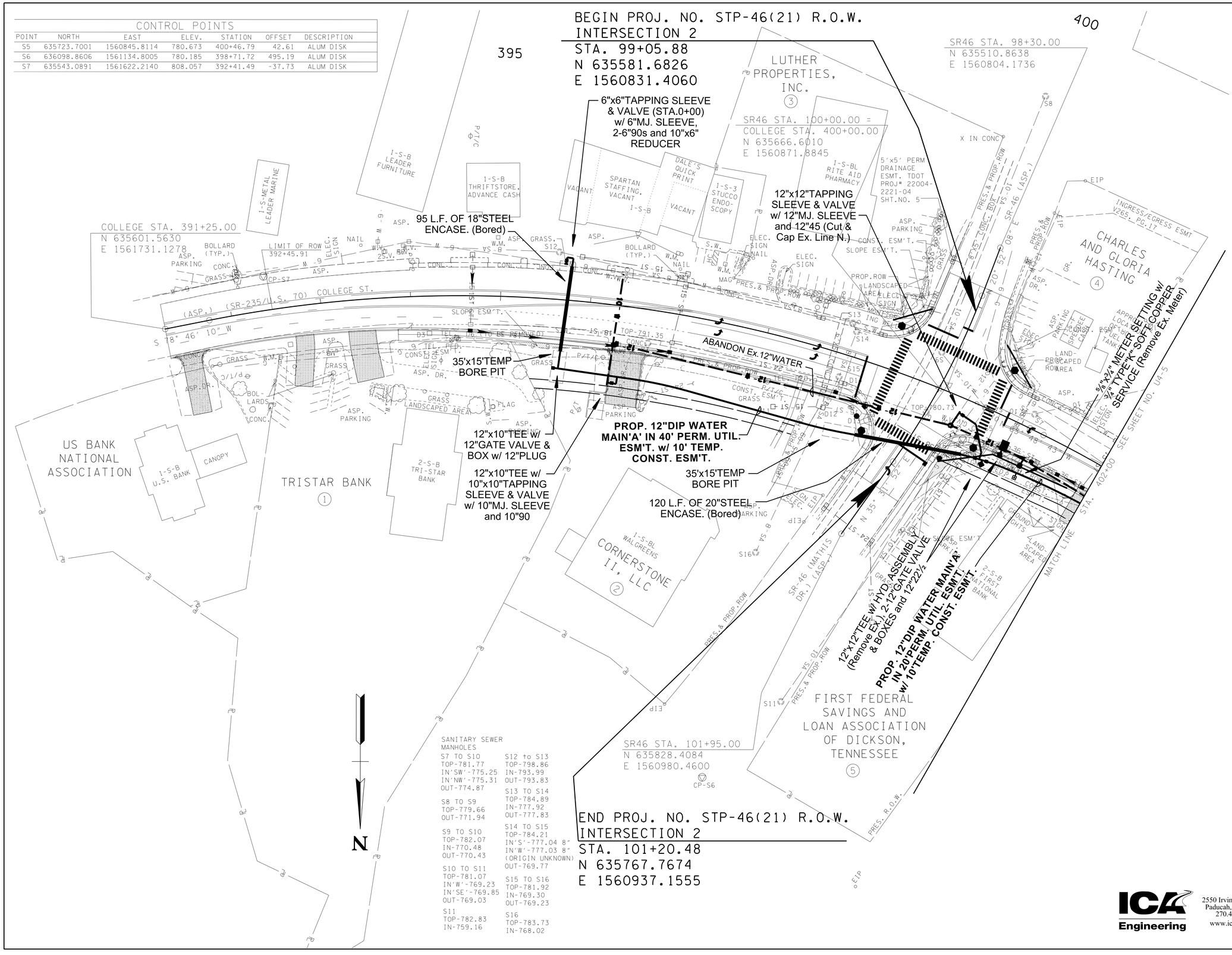
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-4

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S5	635723.7001	1560845.8114	780.673	400+46.79	42.61	ALUM DISK
S6	636098.8606	1561134.8005	780.185	398+71.72	495.19	ALUM DISK
S7	635543.0891	1561622.2140	808.057	392+41.49	-37.73	ALUM DISK



SANITARY SEWER MANHOLES

S7 TO S10
TOP-781.77
IN'SW'-775.25
IN'NW'-775.31
OUT-774.87

S8 TO S9
TOP-779.66
OUT-771.94

S9 TO S10
TOP-782.07
IN-770.48
OUT-770.43

S10 TO S11
TOP-781.07
IN'W'-769.23
IN'SE'-769.85
OUT-769.03

S11
TOP-782.83
IN-759.16

S12 to S13
TOP-798.86
IN-793.99
OUT-793.83

S13 TO S14
TOP-784.89
IN-777.92
OUT-777.83

S14 TO S15
TOP-784.21
IN'S'-777.04 8"
IN'W'-777.03 8"
(ORIGIN UNKNOWN)
OUT-769.77

S15 TO S16
TOP-781.92
IN-769.30
OUT-769.23

S16
TOP-783.73
IN-768.02

WATER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115445
STATE OF TENNESSEE
8/5/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT
INTERSECTION NO. 2
STA.391+25 TO STA.402+00
SCALE: 1"= 50'

ICA Engineering
2550 Irvin Cobb Drive
Paducah, KY 42003
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10/7/2014 11:48:31 AM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-5

SANITARY SEWER MANHOLES

S1 TO S2
TOP-810.81
OUT-804.75

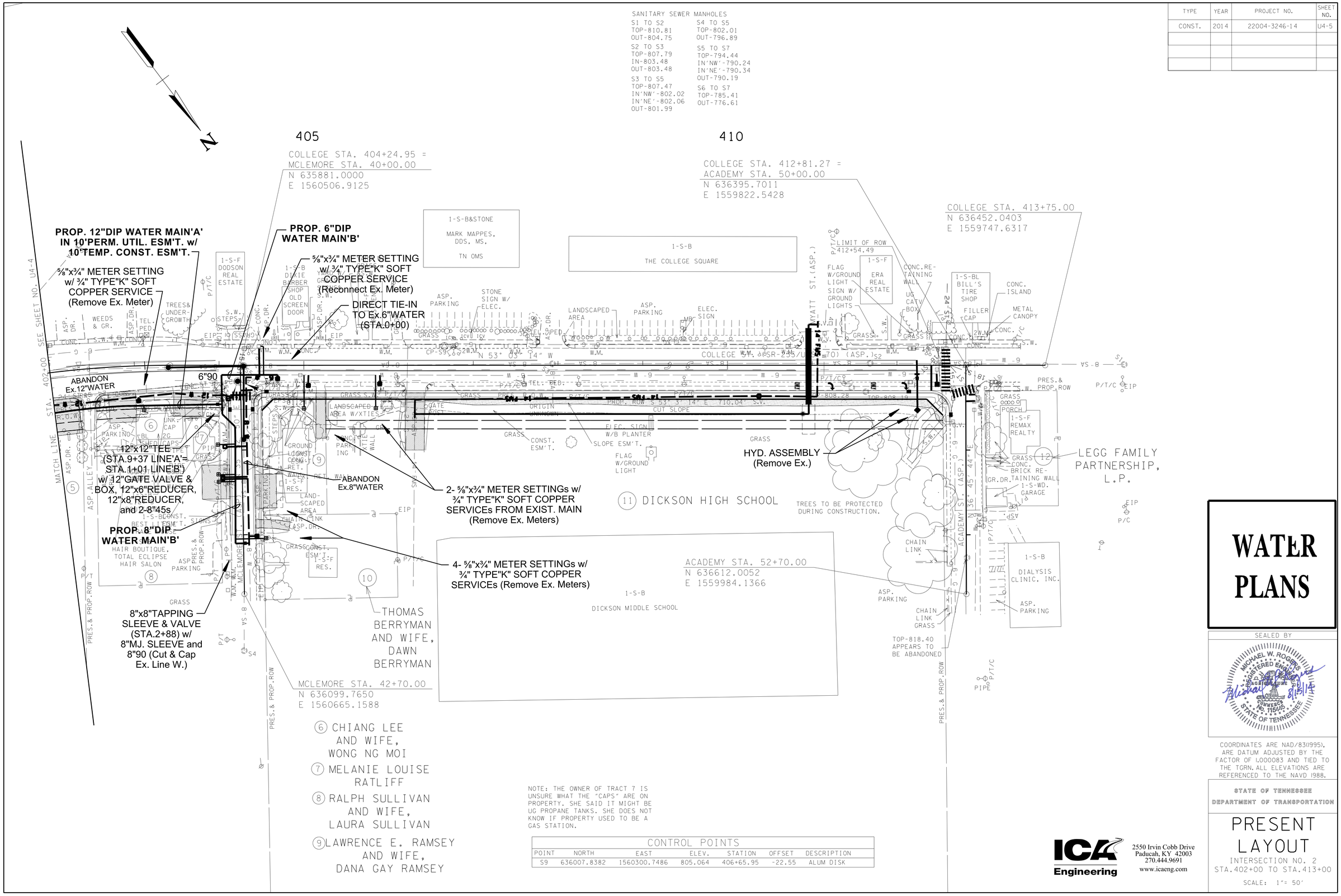
S2 TO S3
TOP-807.79
IN-803.48
OUT-803.48

S3 TO S5
TOP-807.47
IN'NW'-802.02
IN'NE'-802.06
OUT-801.99

S4 TO S5
TOP-802.01
OUT-796.89

S5 TO S7
TOP-794.44
IN'NW'-790.24
IN'NE'-790.34
OUT-790.19

S6 TO S7
TOP-785.41
OUT-776.61



NOTE: THE OWNER OF TRACT 7 IS UNSURE WHAT THE "CAPS" ARE ON PROPERTY. SHE SAID IT MIGHT BE UG PROPANE TANKS. SHE DOES NOT KNOW IF PROPERTY USED TO BE A GAS STATION.

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S9	636007.8382	1560300.7486	805.064	406+65.95	-22.55	ALUM DISK

WATER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115449
STATE OF TENNESSEE
8/13/14

COORDINATES ARE NAD/83(1995). ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO. 2
STA.402+00 TO STA.413+00

SCALE: 1"= 50'

ICA Engineering
2550 Irvin Cobb Drive
Paducah, KY 42003
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10/7/2014 12:08:37 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-6

STORM DRAINAGE STRUCTURES

D1
TOP-851.57
OUT-849.08
15"RCP

D2
TOP-851.27
IN-848.07
15"RCP
BOT-847.62
OUT-847.53
18"RCP

D3 (TO BE REMOVED)
TOP-854.97
IN-'SW'-844.66
18"RCP
IN'NW'-851.17
18"RCP
BOT-840.77
OUT-840.76
18"RCP

D4
INV-852.34
8"PVC W/
STONE EW

D5
INV-851.18
18"RCP
W/CONC. EW

D6
INV-854.22
W/CONC. EW

D7
INV-852.77
W/CONC. EW

D8
INV-858.58
W/CONC. EW

D9
INV-859.25
W/CONC. EW

D10
TOP-854.35
OUT-840.54
18"RCP

D11
TOP-863.19
OUT-859.88
18"RCP

D12
INV-875.83
18"CMP

D13
INV-872.76
18"CPP

D14
INV-869.54

D15
INV-867.57

D16
INV-868.79

D17
NOT FOUND
APPROX.
LOC. SHOWN

D18
INV-864.90
W/CONC. EW
22"X14" RCP

D19
INV-863.66
W/CONC. EW
22"X14" RCP

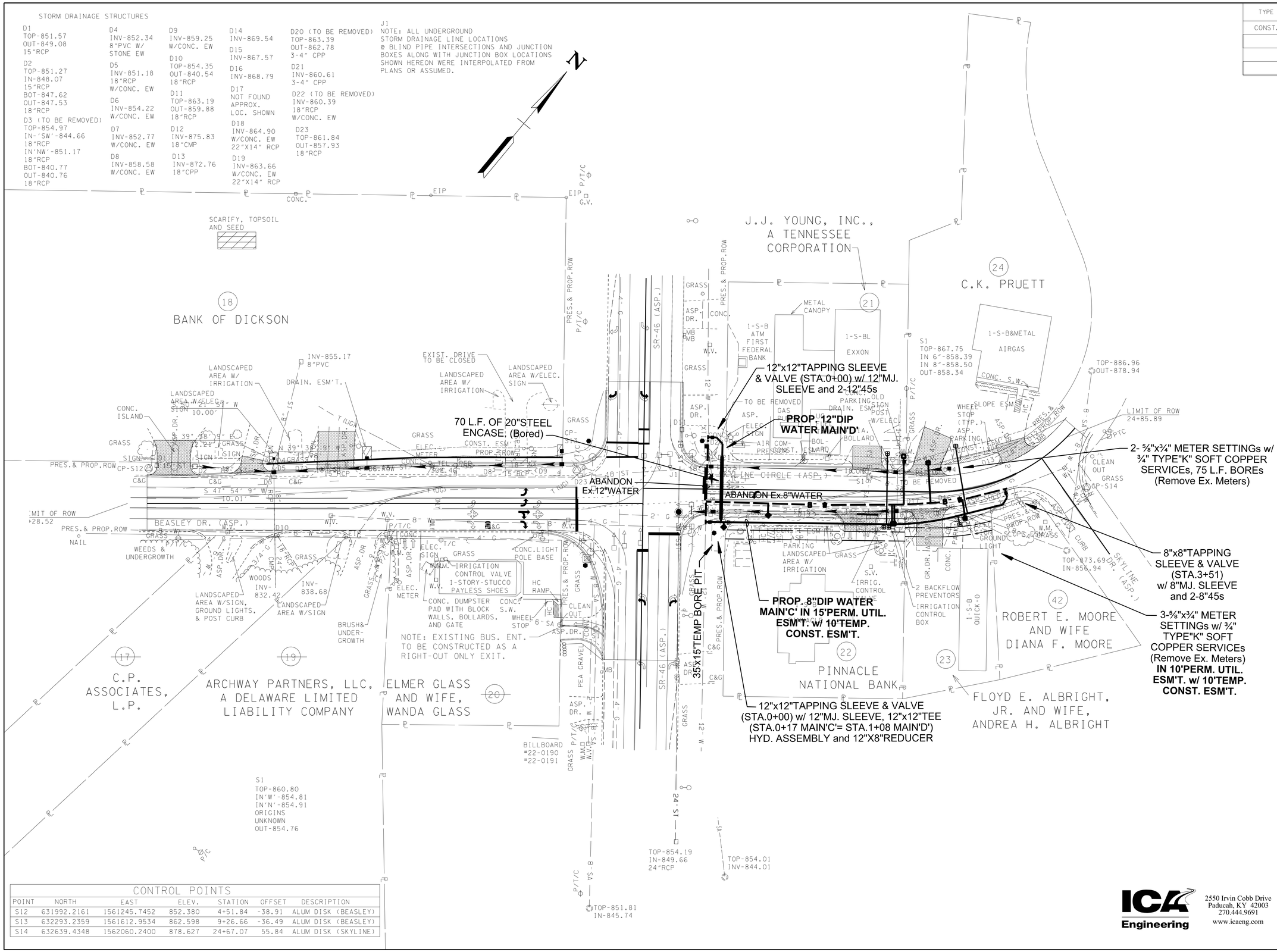
D20 (TO BE REMOVED)
TOP-863.39
OUT-862.78
3-4" CPP

D21
INV-860.61
3-4" CPP

D22 (TO BE REMOVED)
INV-860.39
18"RCP
W/CONC. EW

D23
TOP-861.84
OUT-857.93
18"RCP

J1
NOTE: ALL UNDERGROUND
STORM DRAINAGE LINE LOCATIONS
@ BLIND PIPE INTERSECTIONS AND JUNCTION
BOXES ALONG WITH JUNCTION BOX LOCATIONS
SHOWN HEREON WERE INTERPOLATED FROM
PLANS OR ASSUMED.



CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S12	631992.2161	1561245.7452	852.380	4+51.84	-38.91	ALUM DISK (BEASLEY)
S13	632293.2359	1561612.9534	862.598	9+26.66	-36.49	ALUM DISK (BEASLEY)
S14	632639.4348	1562060.2400	878.627	24+67.07	55.84	ALUM DISK (SKYLINE)

$$$$SYTIME$$$$$$$
$$$$DGNSPEC$$$$$$$$

WATER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
NO. 116445
STATE OF TENNESSEE
8/13/14

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.5

SCALE: 1"= 50'

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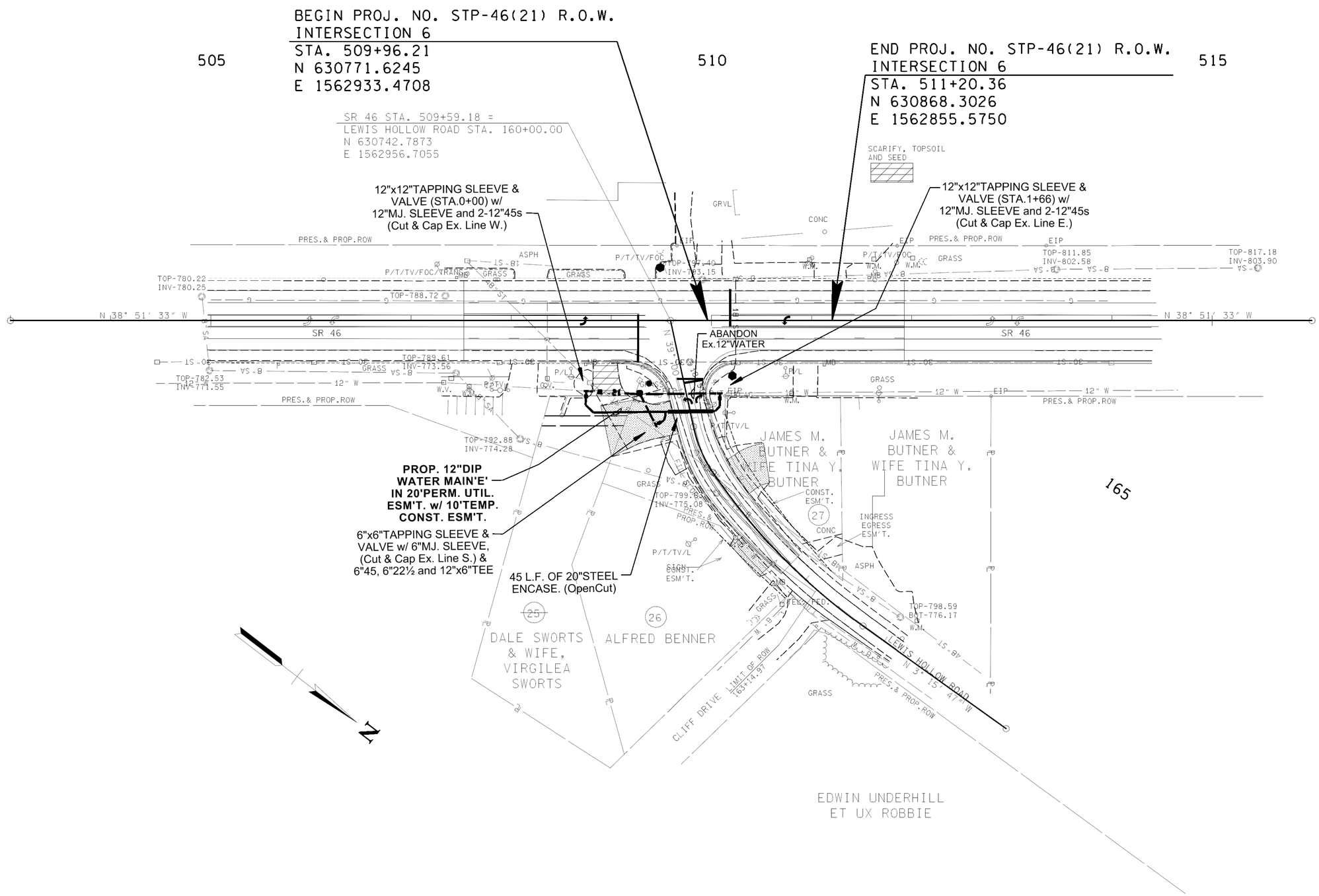
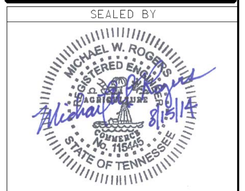
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-7



WATER PLANS

SEALED BY



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.6

SCALE: 1"= 50'

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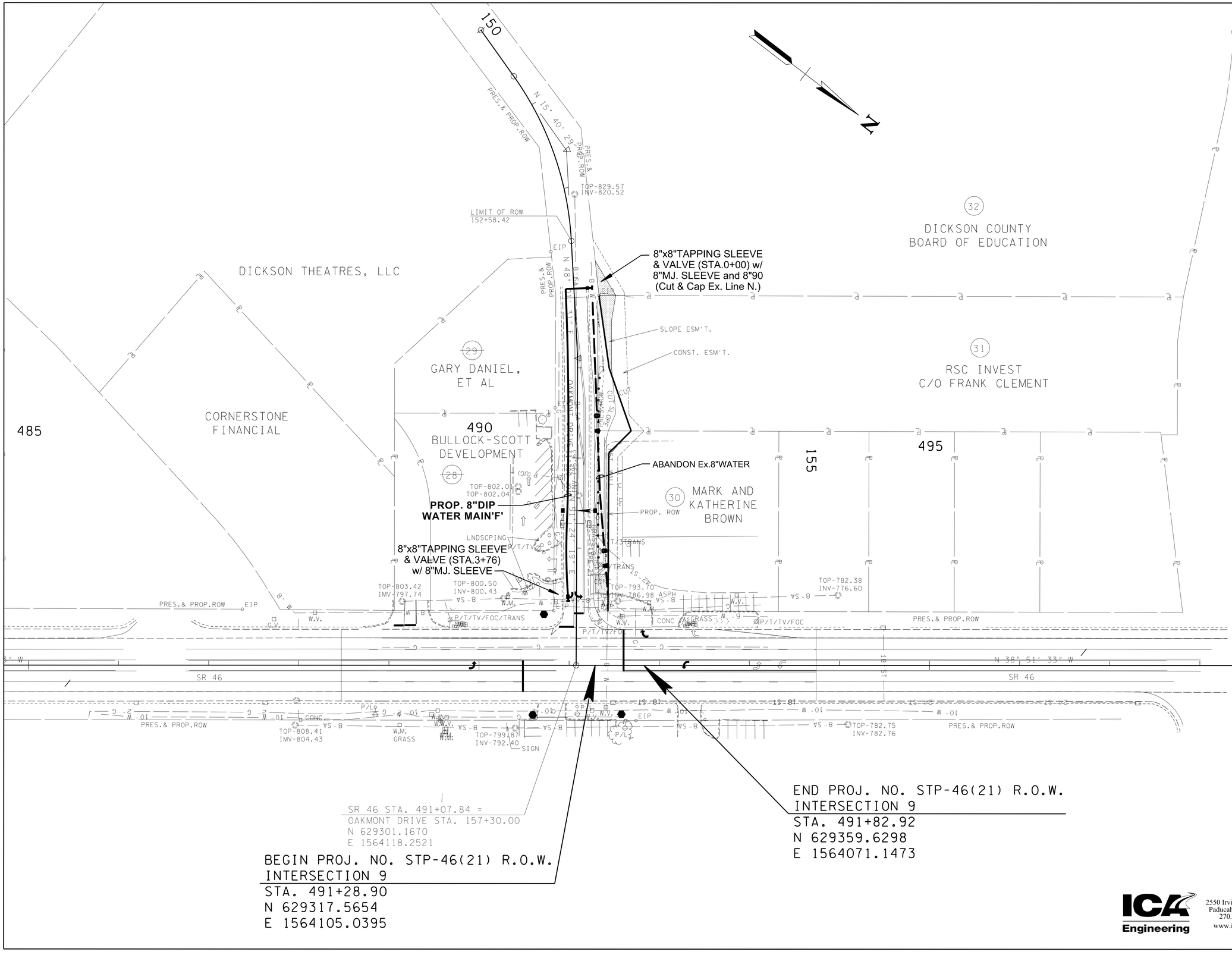
8/18/2014 10:56 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\WATER\W007.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-8



WATER PLANS

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REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 115445
STATE OF TENNESSEE

Michael W. Rogers 8/15/14

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PRESENT LAYOUT

INTERSECTION NO.9

SCALE: 1"= 50'

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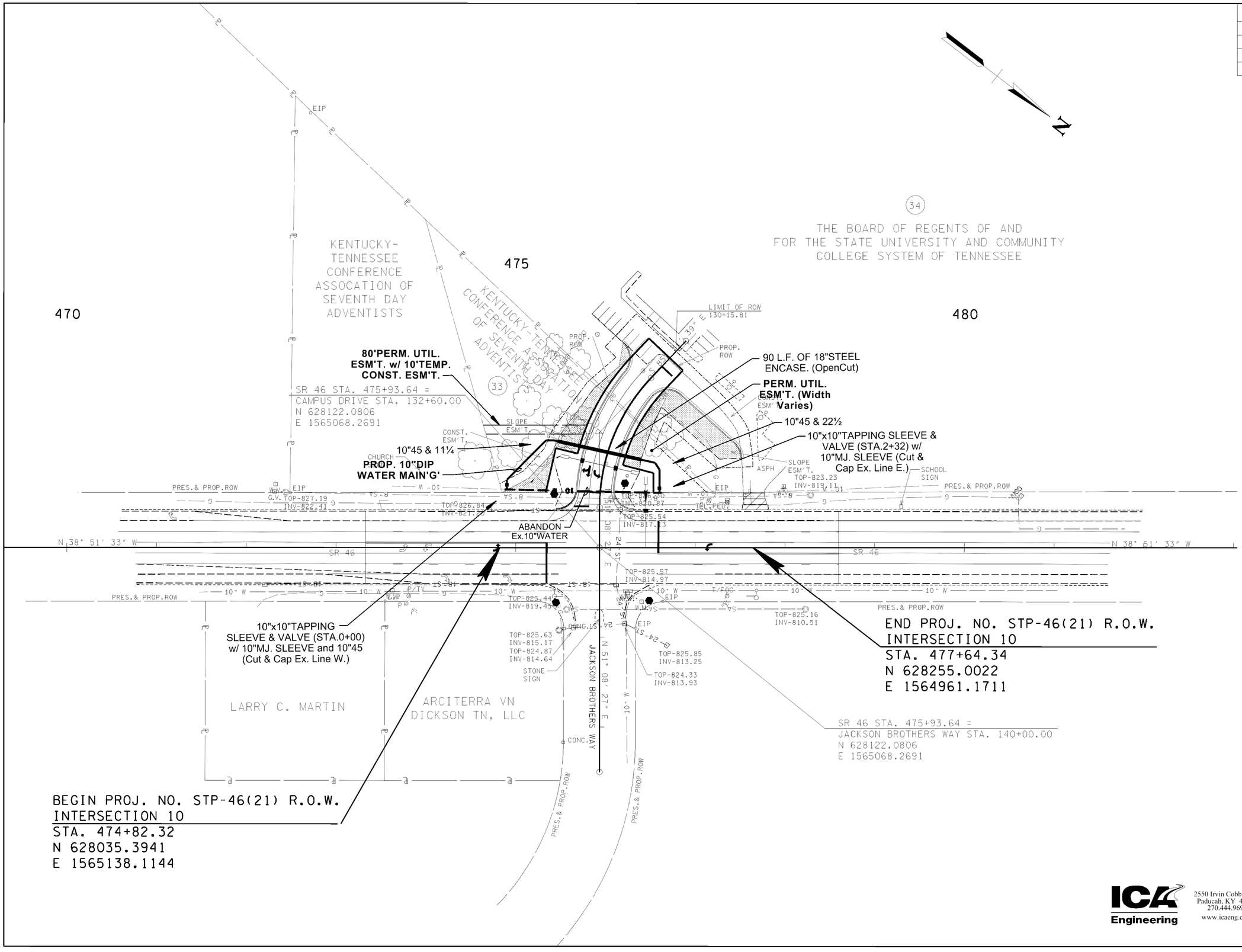
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-9



WATER PLANS

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8/18/14

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.10

SCALE: 1"= 50'

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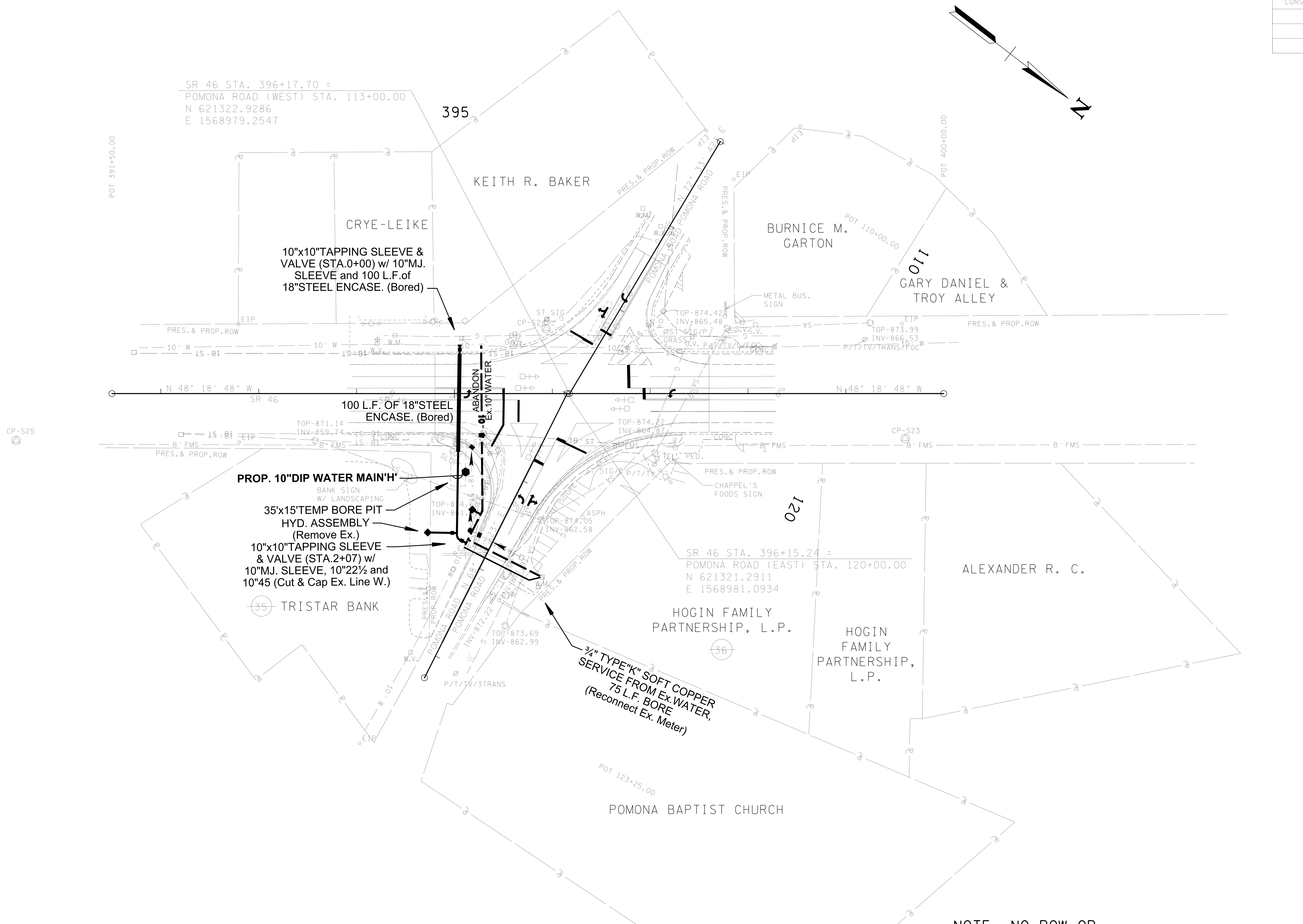
8/18/2014 1:03:13 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\WATER\W009.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-10



CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S23	621585.2820	1568753.6448	873.44	399+60.67	45.88′ (RT)
S24	621257.4832	1568953.1085	873.68	395+93.70	66.26′ (LT)

NOTE: NO ROW OR EASEMENTS REQUIRED.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

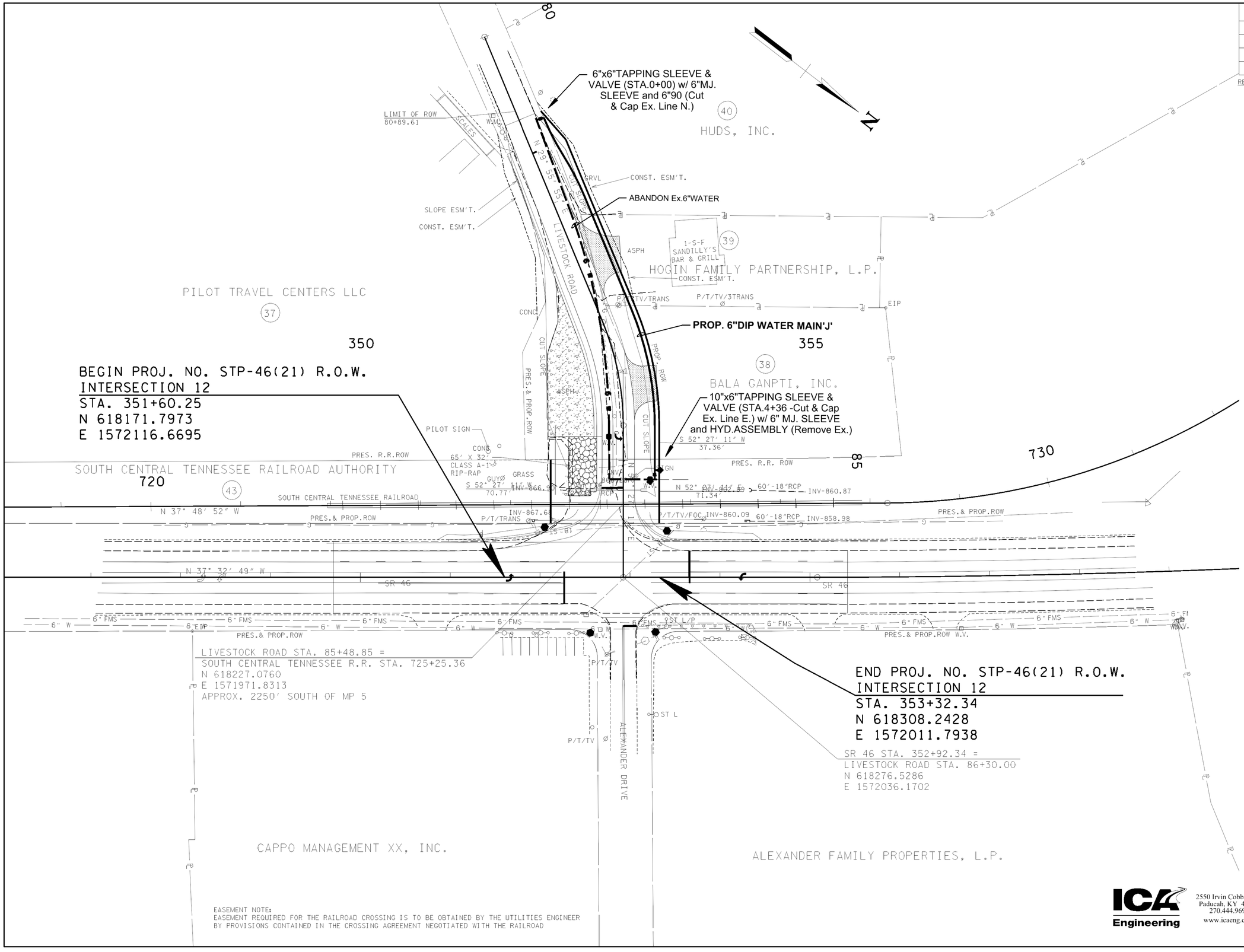
INTERSECTION NO.11

SCALE: 1″= 50′

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-11

REV. 04-30-14: ADDED BUILDING TO TRACT NO. 39.



EASEMENT NOTE:
EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO. 12

SCALE: 1"= 50'

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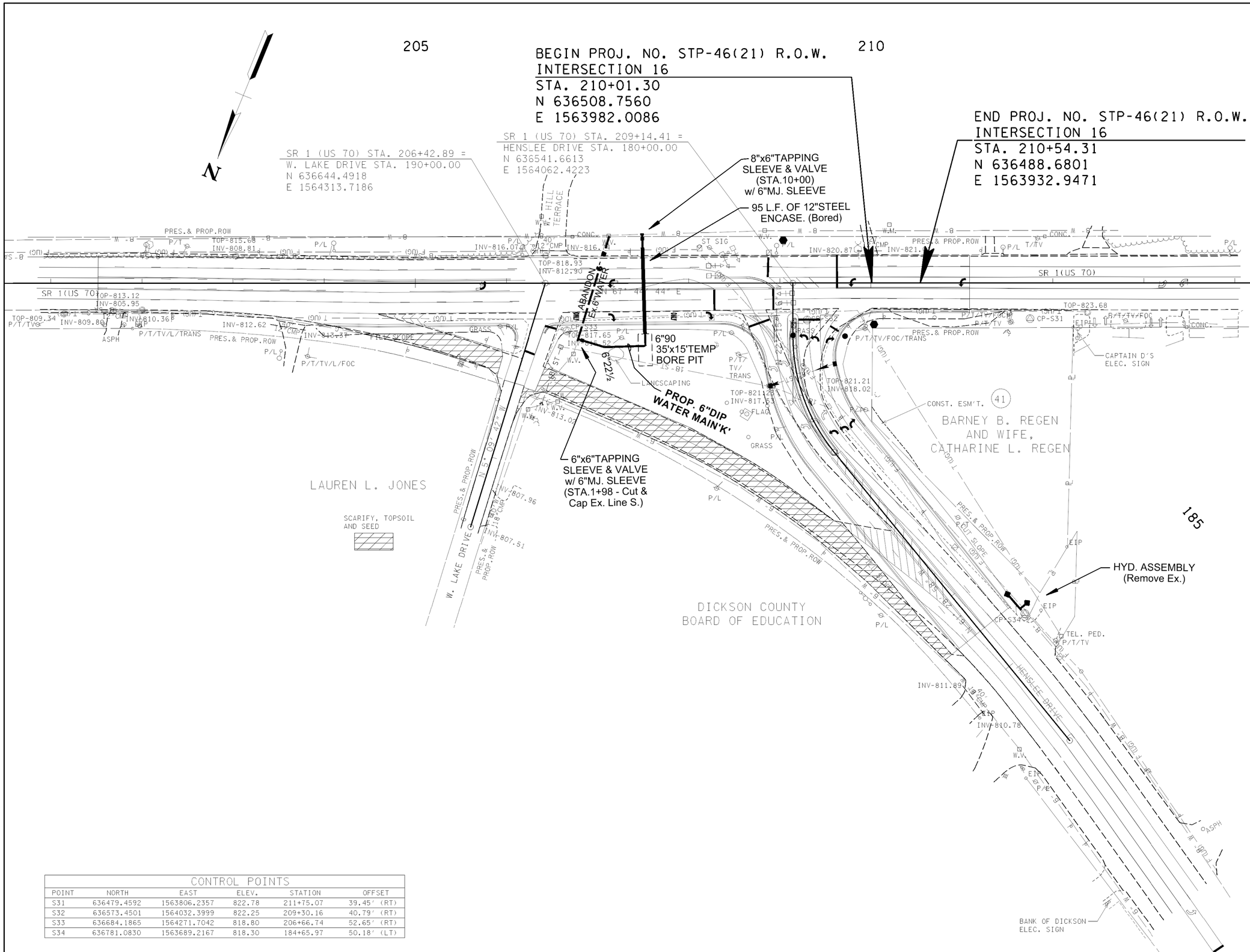
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-12



CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S31	636479.4592	1563806.2357	822.78	211+75.07	39.45' (RT)
S32	636573.4501	1564032.3999	822.25	209+30.16	40.79' (RT)
S33	636684.1865	1564271.7042	818.80	206+66.74	52.65' (RT)
S34	636781.0830	1563689.2167	818.30	184+65.97	50.18' (LT)

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WATER PLANS

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COMMERCE
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STATE OF TENNESSEE
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.16

SCALE: 1"= 50'

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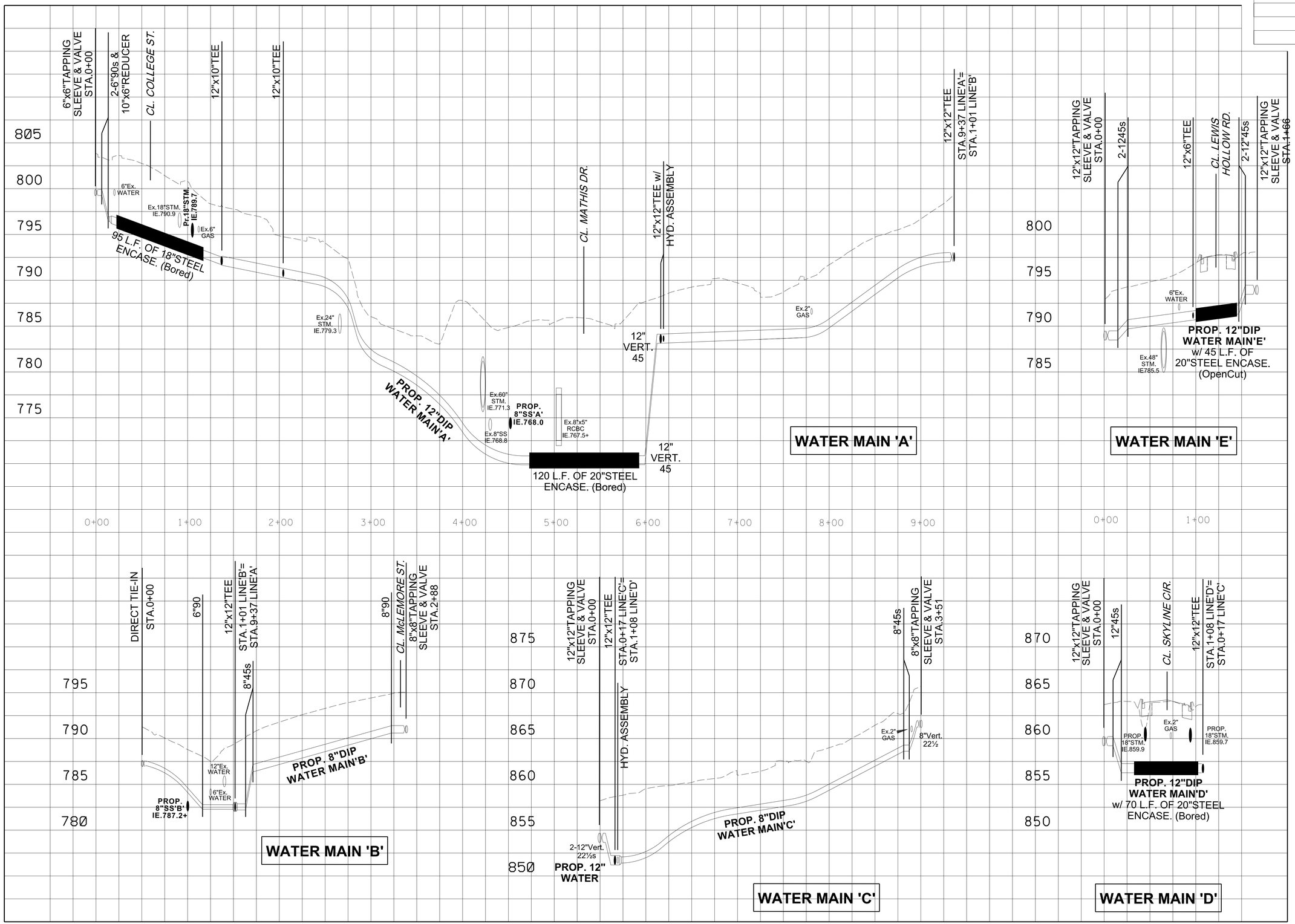
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-13



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WATER PLANS

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

WATER MAINS 'A-E'

SCALE: 1"=5' VERT. 1"= 50'HORIZ.

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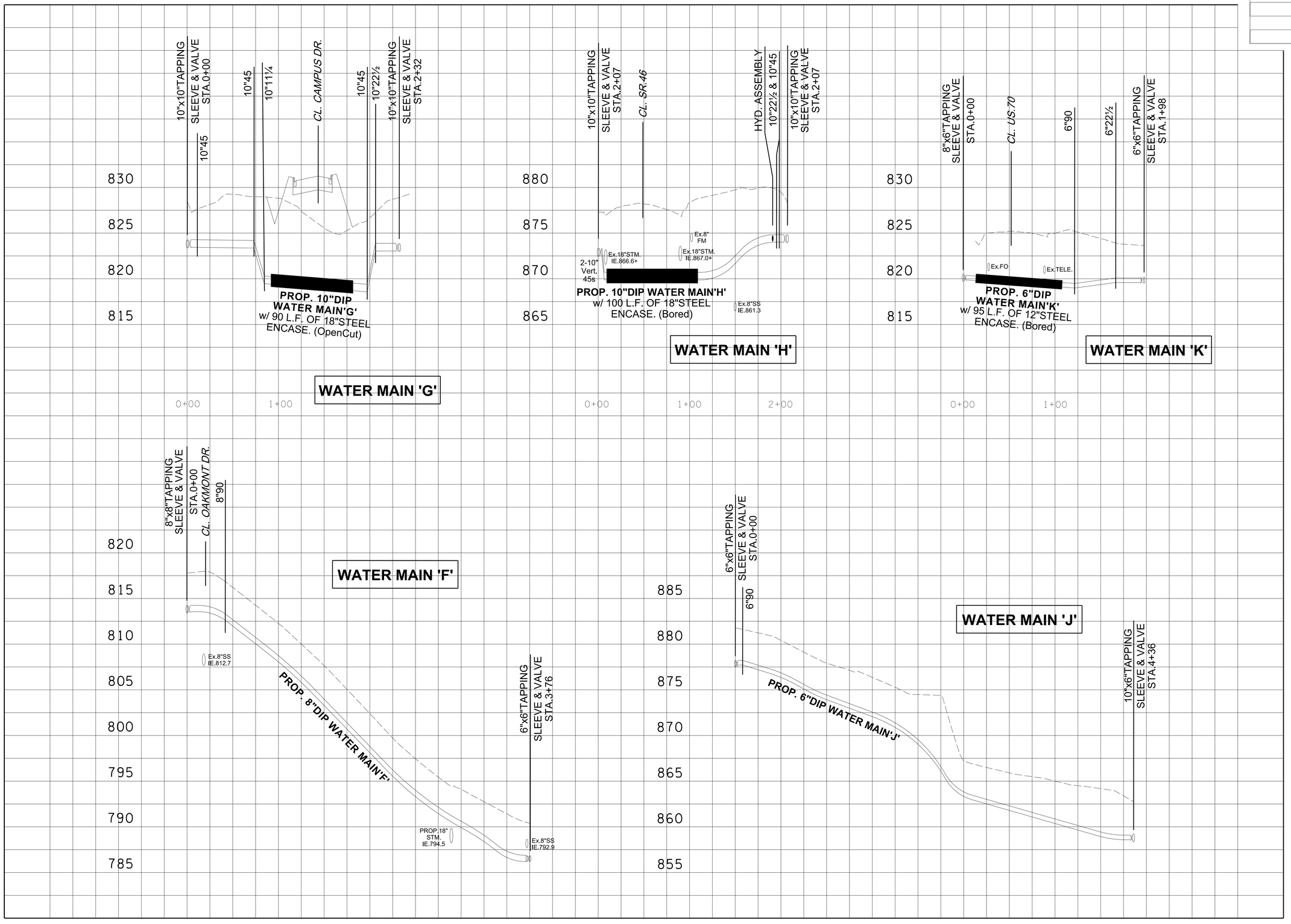
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-14



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WATER PLANS

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

WATER MAINS 'F-K'

SCALE: 1"=5' VERT.
1"= 50'HORIZ.

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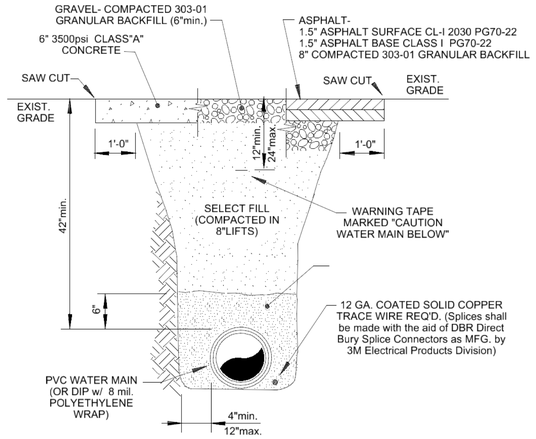
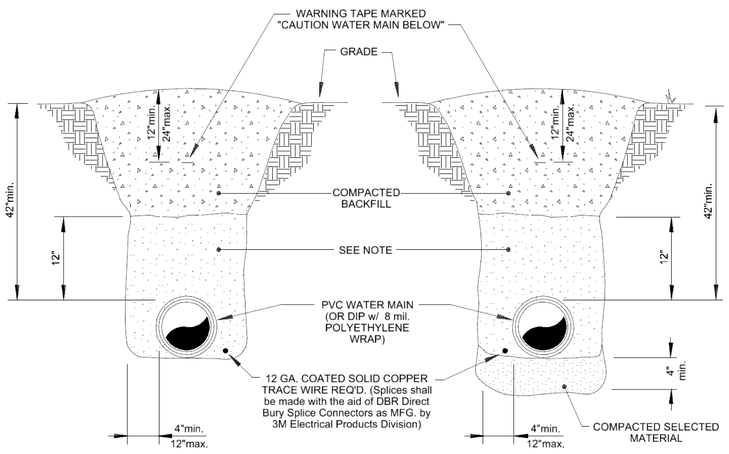
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-15



OPEN CUT DRIVEWAY TRENCH

NOTE:

PIPE BEDDING, WARNING TAPE, TRACER WIRE AND POLYETHYLENE WRAP SHALL BE INCIDENTAL TO THE UNIT PRICE FOR WATER MAIN.



TRENCH SECTION IN SOIL

TRENCH SECTION IN ROCK

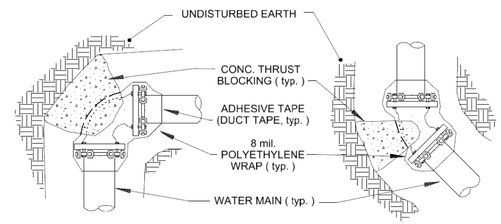
NOTES:

COMPACTED BACKFILL SHALL BE PLACED TO A ONE FOOT min. DEPTH OF COVER. THE INITIAL BACKFILL SHALL BE A MATERIAL FREE FROM ROCKS GREATER THAN ½" dia., SOIL CLODS, OR FROZEN MATERIAL. WHEN AUTOMATIC TAMPERS ARE USED, CARE SHALL BE EXERCISED TO AVOID DAMAGE TO THE PIPE.

ALL WATER LINE TRENCHES AND BORE PIT AREAS SHALL BE MECHANICALLY COMPACTED IN 12" LOOSE LIFTS SPECIFIED COMPACTION PERCENTAGES AS OUTLINED IN SPECIFICATION SECTION 02220.

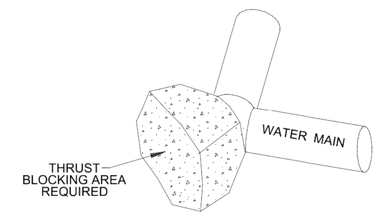
COMPACTED BACKFILL, WARNING TAPE, TRACER WIRE AND POLY-WRAP SHALL BE INCIDENTAL TO THE UNIT PRICE FOR WATER MAIN.

PIPE BEDDING, WARNING TAPE, TRACER WIRE AND POLYETHYLENE WRAP SHALL BE INCIDENTAL TO THE UNIT PRICE FOR WATER MAIN.

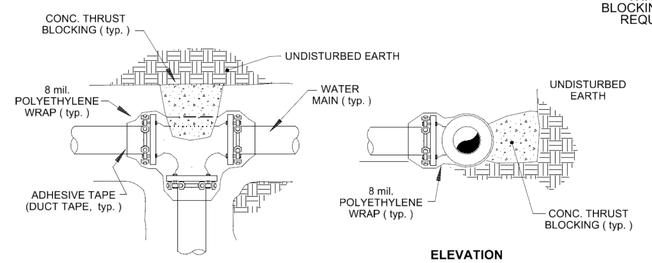


PLAN OF 90°FITTING

PLAN OF 45° OR 22½° FITTINGS



ISOMETRIC



PLAN OF TEE

ELEVATION

THRUST BLOCKING

NOTES:

PROVIDE THRUST RESTRAINT GLANDS BY EBBA IRON, UNI-FLANGE OR APPROVED EQUAL FOR ALL MECHANICAL JOINT FITTINGS.

THRUST BLOCKING TO BE KY. CLASS"B" CONCRETE (2500 psi).

THRUST BLOCK AREA

PIPE SIZE	22½° FITTING	45° FITTING	90° FITTING	TEES
6"	2 sq. ft.	3 sq. ft.	4 sq. ft.	4 sq. ft.
8"	3 sq. ft.	4 sq. ft.	8 sq. ft.	8 sq. ft.
10"	4 sq. ft.	6½ sq. ft.	12 sq. ft.	12 sq. ft.
12"	5 sq. ft.	9 sq. ft.	16 sq. ft.	16 sq. ft.
16"	8 sq. ft.	16 sq. ft.	29 sq. ft.	29 sq. ft.
18"	12 sq. ft.	20 sq. ft.	35 sq. ft.	35 sq. ft.
20"	13 sq. ft.	24 sq. ft.	45 sq. ft.	45 sq. ft.
24"	18 sq. ft.	35 sq. ft.	64 sq. ft.	64 sq. ft.

THRUST RESTRAINT TABLE
(min. LENGTH OF PIPE RESTRAINTED FROM FITTING)

PIPE SIZE	11¼° FITTING	22½° FITTING	45° FITTING	90° FITTING	TEE BRANCH	DEAD END
6"	2 ft.	4 ft.	9 ft.	21 ft.	24 ft.	29 ft.
8"	3 ft.	6 ft.	12 ft.	28 ft.	34 ft.	38 ft.
10"	3 ft.	7 ft.	14 ft.	33 ft.	41 ft.	46 ft.
12"	4 ft.	8 ft.	16 ft.	39 ft.	50 ft.	55 ft.
16"	5 ft.	10 ft.	21 ft.	51 ft.	66 ft.	72 ft.
18"	6 ft.	11 ft.	23 ft.	57 ft.	74 ft.	80 ft.
20"	6 ft.	12 ft.	26 ft.	62 ft.	82 ft.	88 ft.
24"	7 ft.	15 ft.	30 ft.	73 ft.	98 ft.	104 ft.

NOTE:

WHEN REQUIRED BY PLAN OR DETAIL A SUFFICIENT NUMBER OF JOINTS SHALL BE RESTRAINED FROM A FITTING TO COMPLY WITH THE LENGTH NOTED IN THE TABLE.

WATER PLANS

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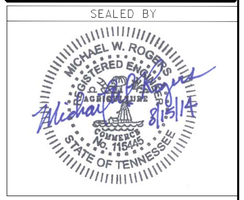

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER DETAILS

NTS

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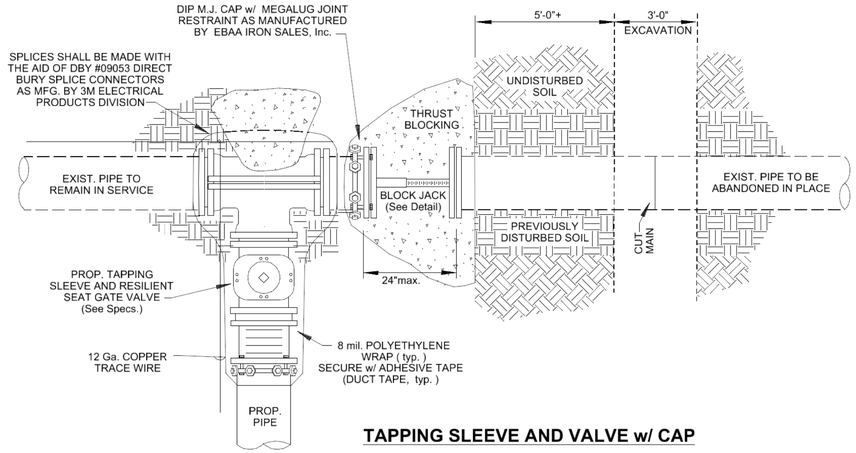
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-16



TAPPING SLEEVE AND VALVE w/ CAP

NOTES:

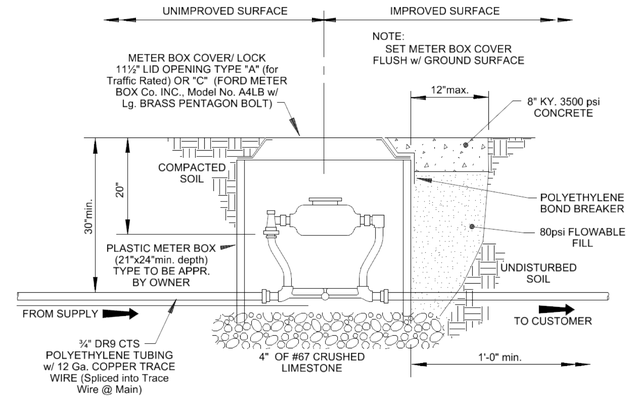
THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PREP WORK FOR THE MAIN TAP PRIOR TO THE OWNERS TAPPING CREW ARRIVAL.

THE CONTRACTOR SHALL CUT AND CAP THE EXISTING WATER LINE AFTER THE REQUIRED TESTING OF THE NEW WATER LINE HAS BEEN COMPLETED AND ACCEPTED BY THE UTILTY.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE MAIN TIE-IN, CONSTRUCTION OF THRUST BLOCKING AS DESIGNATED, PLACEMENT OF VALVE BOX, BACKFILL AND SURFACE RESTORATION.

AFTER CONCRETE THRUST BLOCKING HAS SET, EXCAVATE AND SEVER ABANDONED WATER MAIN WHERE SHOWN TO PREVENT FUTURE DISTURBANCE.

COST FOR BLOCK JACK, CAP, MEGALUG, STEEL PLATING, EXCAVATION, ETC. IS INCIDENTAL TO THE UNIT PRICE - PREPARATION FOR TAPPING SLEEVE & VALVE.



⅝"x¾" to 1" METER SETTING

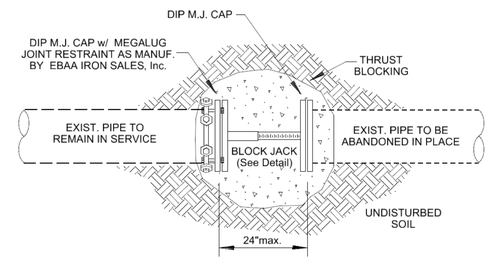
NOTES:

METER SETTING SHALL BE A ⅝"x¾" COPPERSETTER WITH BALL INLET AND COMPRESSION OUTLET VALVES. COPPERSETTER SHALL BE A FORD 70 SERIES MODEL VBG72 OR APPROVED EQUAL.

BOX PLACEMENT EXCAVATION IN IMPROVED AREAS SUCH AS DRIVEWAYS, SIDEWALKS, ETC. TO BE BACKFILLED AND CAPPED WITH CONCRETE.

EXISTING METER BOX BONNETS TO BE RETURNED TO UTILITY OWNER'S MATERIAL YARD.

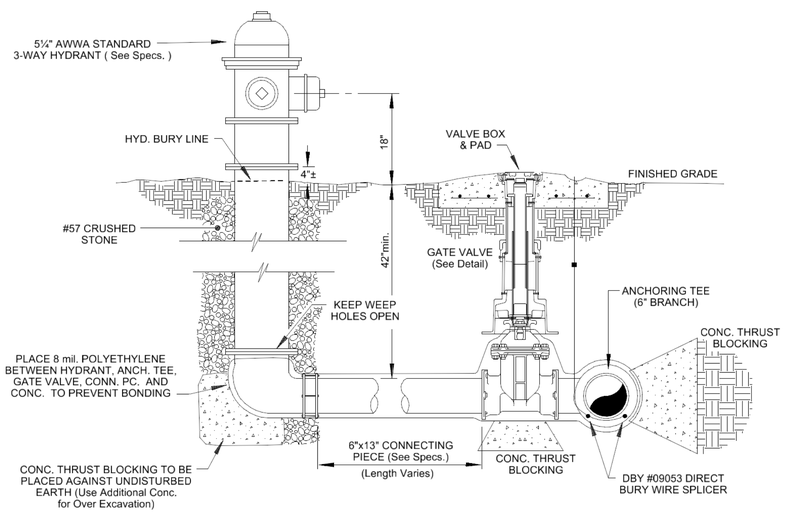
COMPACTED BACKFILL AND TRACER WIRE SHALL BE INCIDENTAL TO THE UNIT PRICE FOR METER SETTING.



CUT & CAP EXIST. MAIN

NOTES:

COST FOR BLOCK JACK, CAP, MEGALUG, STEEL PLATING, EXCAVATION, ETC. IS INCIDENTAL TO THE UNIT PRICE - CUT & CAP EXISTING MAIN.



FIRE HYDRANT ASSEMBLY

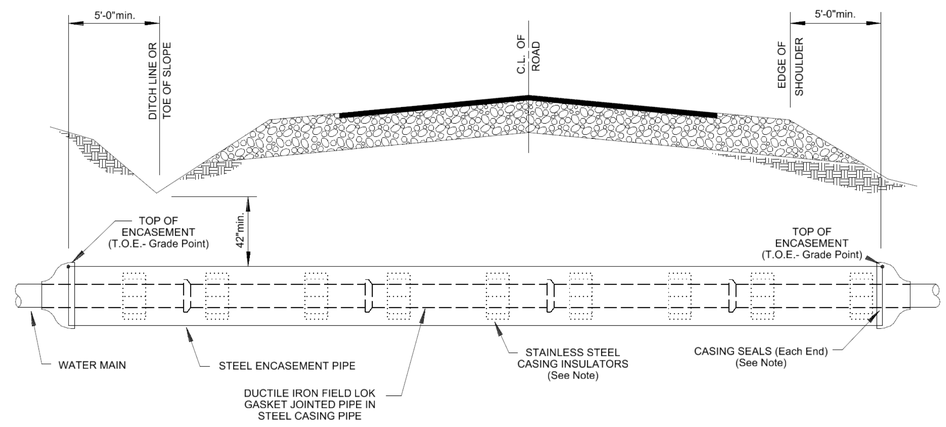
NOTES:

THE UNIT PRICE ASSOCIATED WITH THE BID ITEM "FIRE HYDRANT ASSEMBLY" SHALL INCLUDE THE FIRE HYDRANT, CONNECTING PIECE, 6"GATE VALVE AND BOX, & ANCHORING TEE WITH THRUST RESTRAINT GLANDS.

ALL CONCRETE SHALL BE CLASS "B"

CRUSHED STONE SHALL BE EXTENDED 6" ABOVE DRAIN OPENINGS IN HYDRANT BASE.

PUMPER NOZZLE TO FACE IN DIRECTION OF STREET UNLESS OTHERWISE SPECIFIED.



STEEL ENCASEMENT

NOTES :

EXCAVATION BETWEEN DITCH LINES OR WITHIN 5'-0" OF THE SHOULDER IF THERE IS NO DITCH IS PROHIBITED. VERIFY THE LENGTH OF ENCASEMENT AT EACH ROADWAY CROSSING AND NOTIFY THE ENGINEER PRIOR TO INSTALLATION IF THE LENGTH NOTED ON THE PLANS IS INSUFFICIENT.

INSTALL FIELD LOK GASKETS WITHIN ALL ENCASEMENT PIPE AND ONE PIPE LENGTH OUTSIDE OF THE CASING ON BOTH ENDS. ALL WATER MAIN WITH STEEL ENCASEMENT SHALL BE POLY-WRAPPED IN ACCORDANCE WITH THE DETAIL PROVIDED.

CASING INSULATORS SHALL BE MODEL S8G-2 AS MFR. BY PSI, 6525 GOFORTH ST., HOUSTON, TX. 77021 OR EQUIVALENT. SPACE AT 6'-0"max. C/C.

CASING SEALS SHALL BE MODEL S AS MFR. BY PSI OR EQUIVALENT.

THE UNIT PRICE FOR STEEL ENCASEMENT SHALL INCLUDE ALL ACCESSORY ITEMS SUCH AS CASING SKIDS, CASING SEALS, & JOINT RESTRAINT GASKETS.

FINISHED STEEL ENCASEMENT PRODUCT SHALL BE INSTALLED WITHIN 6" OF GRADE POINT ELEVATIONS OR WITHIN 6" OF GRADE POINTS AS PRIOR AGREED BY FIELD ENGINEER.

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2550 Irvin Cobb Drive
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WATER PLANS

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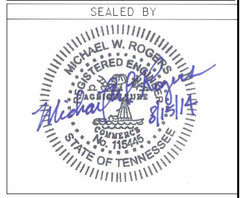

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER DETAILS

NTS

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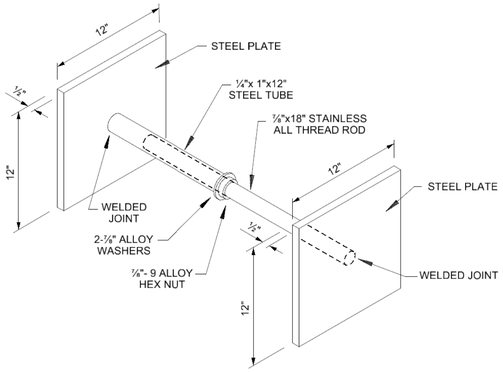
E:_2014 JOBS\14077 Dickson County\Dwgs\WATER\W016 Details.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U4-17



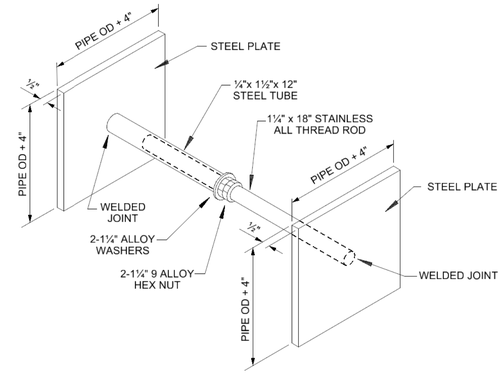
TYPICAL CUT & CAP w/ BLOCK JACK (<8" WATER MAINS)

NOTES:

LEAVE JACK IN PLACE WITH CONCRETE THRUST BLOCKING.

ENSURE ENDS OF EXISTING WATER MAIN ARE CUT SQUARELY PRIOR TO INSTALLATION.

THE COST OF THIS ITEM SHALL BE INCIDENTAL TO THE UNIT PRICE FOR WATER MAIN.



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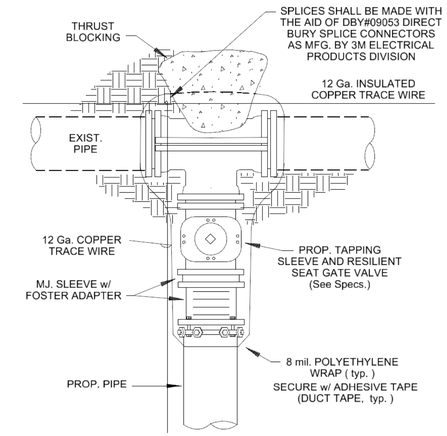
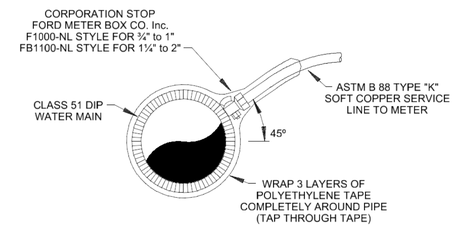


TAPPING SLEEVE AND VALVE

NOTE:

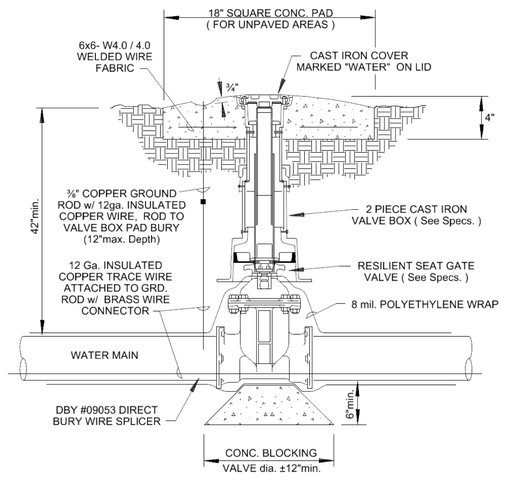
THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PREP WORK FOR THE MAIN TAP PRIOR TO THE TAPPING CREW ARRIVAL. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE MAIN TIE-IN, CONSTRUCTION OF THRUST BLOCKING AS DESIGNATED, PLACEMENT OF VALVE BOX, BACKFILL AND SURFACE RESTORATION.

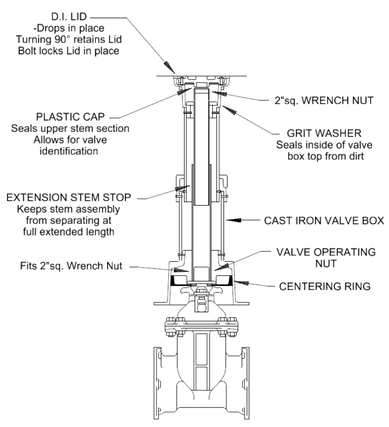


SERVICE TAP FOR DIP POLYETHELENE ENCASED

NOTE:

DUCTILE IRON AND CAST IRON PIPE SHALL BE INSTALLED WITH DIRECT MAIN TAP. NO SADDLE REQUIRED UNLESS OTHERWISE APPROVED BY PADUCAH WATER.





GATE VALVE & BOX (<12")

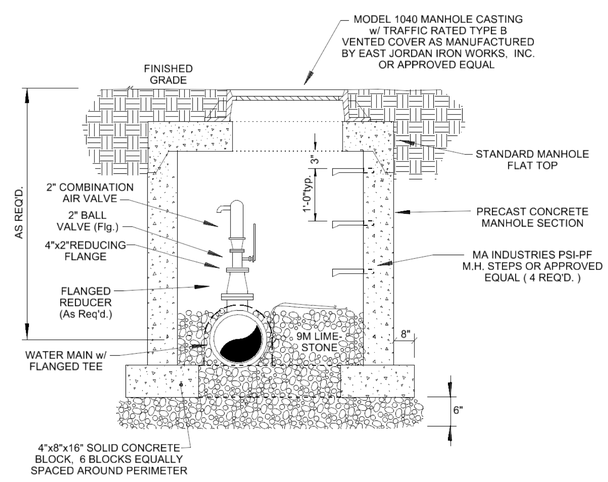
NOTES:

CONCRETE PADS SHALL BE CONSTRUCTED AROUND ALL MAIN LINE, FIRE LINE, AND FIRE HYDRANT GATE VALVE BOXES, EXCEPT WITHIN HARD PAVED AREAS.

CONCRETE PADS SHALL BE KDOH CLASS"A" CONCRETE WITH A WOOD FLOAT FINISH AND TOOLED EDGE.

THE VALVE BOX SHALL NOT TRANSMIT SHOCK OR STRESS TO THE VALVE.

INSTALL VALVE BOX PAD NO LESS THAN 9 MONTHS FOLLOWING MAIN INSTALLATION AND SEAL ANNULAR SPACE BETWEEN VALVE BOX & PAD WITH SILICONE SEALANT.



AIR RELEASE VALVE & VAULT

NOTES:

12 GA. COATED SOLID COPPER TRACE WIRE TO BE EXTENDED 30" INTO THE VAULT.

COMBINATION AIR VALVE SHALL BE A 2" MODEL D-041-C AS MANUFACTURED BY A.R.I. FLOW CONTROL ACCESSORIES OR ENGINEER APPROVED EQUAL.

WATER PLANS

SEALED BY

MICHAEL W. ROGERS REGISTERED ENGINEER NO. 115449 STATE OF TENNESSEE 8/18/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER DETAILS

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Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET TYPICAL SECTIONS PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLE PRESENT LAYOUT R.O.W. DETAILS
4-7	PROPOSED LAYOUTS
8	PROFILES PROFILE OF PRIVATE DRIVES CULVERT CROSS-SECTIONS PROPOSED SIGNAL LAYOUT PROPOSED F.O. INTERCONNECT LAYOUT EROSION PREVENTION AND SEDIMENT CONTROL PLAN ROADWAY CROSS-SECTIONS
9-11	SEWER DETAILS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

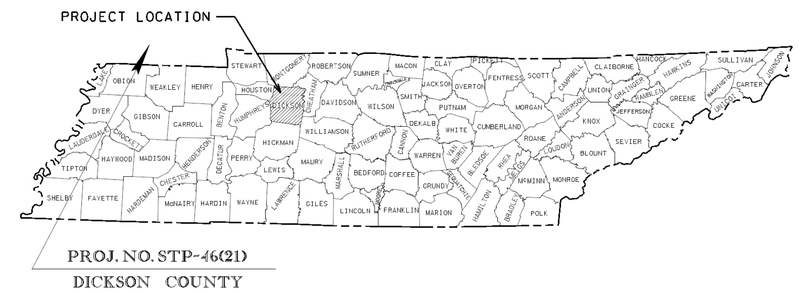
DICKSON COUNTY

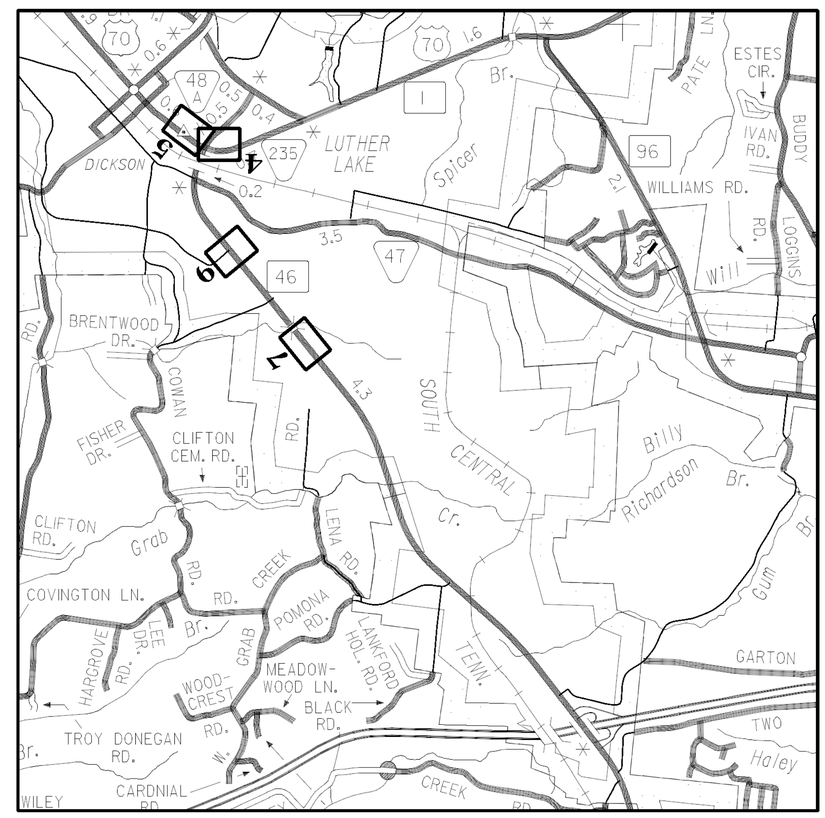
STATE ROUTE 46 UTILITY RELOCATION
FROM I-40 TO SR-1 (US-70, HENSLEE DRIVE), INCLUDING THE INTERSECTION OF SR-1 AT SR-1 (EAST COLLEGE STREET)

UTILITY RELOCATION

STATE HIGHWAY NO. 46 F.A.H.S. NO. NA

TENN.	YEAR	SHEET NO.
	2014	U5-1
FED. AID PROJ. NO.	STP-46(21)	
STATE PROJ. NO.	22004-3246-14	





SCALE: 1"= 1/2 MILE

NO EQUATIONS
NO EXCLUSIONS

SEWER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
DESIGN ENGINEER
NUMBER
No. 115445
STATE OF TENNESSEE
8/15/14

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 4, 2014 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

DIRECTOR OF PROJECT DEVELOPMENT _____

DESIGNED BY _____

DESIGNER _____ CHECKED BY _____

P.E. NO. _____

PIN NO. _____

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2550 Irvin Cobb Drive
Paducah, KY 42003
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-2

GENERAL NOTES:

1 CONDUCT ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH APPLICABLE O.S.H.A. REGULATIONS AND OTHER PREVAILING HEALTH & SAFETY STANDARDS.

2 PROVIDE ALL MISCELLANEOUS ITEMS, NOT LISTED BUT REQUIRED FOR CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.

3 VERIFY ALL TENNESSEE DEPARTMENT OF TRANSPORTATION, COUNTY, OR CITY ENCROACHMENT PERMITS REQUIRED FOR THIS PROJECT HAVE BEEN OBTAINED. POST ALL PERMITS ON THE CONSTRUCTION SITE.

4 IMPLEMENT TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, "THE TENNESSEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", WHEN ANY OPERATION ADVERSELY AFFECTS TRAFFIC CONTROL. DEPLOY PROPER LIGHTING, BARRICADING, AND FLAGMEN. FURNISH, ERECT AND MAINTAIN TRAFFIC CONTROL DEVICES AT NO ADDITIONAL COST TO THE OWNER.

5 ALL UTILITIES ARE SHOWN IN THEIR GENERAL LOCATION. PRIOR TO INITIATING CONSTRUCTION, FIELD LOCATE ALL UTILITIES. EXPOSE UTILITIES LOCATED WITHIN THE DISTURBED LIMITS UTILIZING MANUAL EXCAVATION WHERE NEEDED TO AVOID DAMAGE TO THE UTILITY. NOTIFY THE ENGINEER OF CONFLICTS WHICH MAY AFFECT PROPER COMPLETION OF THE WORK. TAKE MEASURES TO PROTECT THE UTILITIES FROM DAMAGE DURING CONSTRUCTION. COORDINATE REPAIRS OF DAMAGED UTILITIES WITH THE OWNERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REQUIRED REPAIR OR REPLACEMENT.

6 IMPLEMENT MEASURES TO PROTECT PROPERTY AND SURVEY MONUMENTS. REPLACE ALL SURVEY MONUMENTS, PROPERTY CORNERS, ETC. DISTURBED BY CONSTRUCTION. ALL PROPERTY CORNERS MUST BE REPLACED BY A PROFESSIONAL SURVEYOR LICENSED TO PRACTICE SURVEYING IN TENNESSEE.

7 RESTORE ALL SOIL AREAS DISTURBED AS A RESULT OF ANY CONSTRUCTION PROCESS TO A CONDITION EQUAL TO OR EXCEEDING PRE-CONSTRUCTION CONDITIONS.

8 FILL DRIVEWAY EXCAVATIONS TO GRADE WITH A TRAFFIC BEARING SURFACE WITHIN 24 HOURS OF EXCAVATION. COORDINATE ACTIVITIES WITH PROPERTY OWNER.

9 RESTORE ROADWAYS AND DRIVEWAYS DAMAGED BY EXCAVATION OR OTHER CONSTRUCTION OPERATIONS TO A CONDITION EQUAL TO OR EXCEEDING PRE-CONSTRUCTION CONDITIONS.

10 DO NOT STORE EXCAVATED MATERIAL IN LOCATIONS THAT BLOCK THE EXISTING STORM DRAINAGE.

11 RESHAPE ALL DITCH LINES DAMAGED DURING CONSTRUCTION TO ORIGINAL LINES AND GRADES OR AS NOTED ON THE GRADING PLAN.

12 REPLACE ALL DRAINAGE PIPES DISTURBED DURING CONSTRUCTION IN-KIND AT NO ADDITIONAL COST TO THE OWNER, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

13 MAINTAIN A MINIMUM 10 FEET HORIZONTAL OR AN 18 INCH VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.

14 REPAIR ANY FENCE, OR PORTION THEREOF, DISTURBED DURING CONSTRUCTION TO A CONDITION EQUAL TO OR EXCEEDING THE PRE-CONSTRUCTION CONDITION.

15 CONDUCT CLEARING, GRUBBING AND CONSTRUCTION ACTIVITIES IN A MANNER MINIMIZING, TO THE EXTENT PRACTICAL, THE DESTRUCTION OF TREES, SHRUBBERY, ETC. THAT MAY BE IN THE PATH OF THE PROPOSED UTILITY.

16 REMOVE ALL DEBRIS, EXCESS MATERIALS, ETC. FROM THE PROJECT SITE AND DISPOSE OF AT AN APPROVED LOCATION AT NO ADDITIONAL COST TO THE OWNER. NO OPEN BURNING WILL BE PERMITTED ON THE SITE.

17 MAINTAIN A CLEAN AND ORDERLY JOB SITE AT ALL TIMES.

18 WITHOUT REGARD TO THE MATERIALS ENCOUNTERED, ALL EXCAVATION ON THIS PROJECT SHALL BE UNCLASSIFIED. ANY REFERENCE TO ROCK, EARTH, OR ANY OTHER MATERIAL ON THE PLAN WHETHER IN NUMBERS, WORDS, LETTERS, OR LINES IS FOR INFORMATION ONLY AND IS NOT TO BE TAKEN AS AN INDICATION OF CLASSIFIED EXCAVATION. UNAUTHORIZED EXCAVATION SHALL BE BACKFILLED AT THE CONTRACTORS EXPENSE WITH COMPACTED EARTH, GRAVEL, OR OTHER MATERIAL AS APPROVED AND DIRECTED BY THE ENGINEER. ANY UNSUITABLE MATERIAL ENCOUNTERED SHALL BE WASTED.

19 "SEED AND PROTECT" ALL DISTURBED AREAS OUTSIDE OF THE T.D.O.T. RIGHT OF WAY IN ACCORDANCE WITH THE T.D.O.T. STANDARD SPECIFICATIONS.

20 WORK HOURS SHALL BE LIMITED TO MONDAY THRU FRIDAY - 6:00 A.M. TO 6:00 P.M. - UNLESS REQUESTED BY THE CONTRACTOR AND APPROVED IN WRITING BY THE OWNER.

21 WORKING ON SITE DURING FEDERALLY OBSERVED HOLIDAYS IS PROHIBITED UNLESS REQUESTED BY THE CONTRACTOR AND APPROVED IN WRITING BY THE OWNER.

23 CONTRACTOR WILL BE REQUIRED TO PROVIDE A DETAILED & ANNOTATED VIDEO CASSETTE OF THE PROPOSED SEWER & FORCEMAIN LINES TO THE ENGINEER PRIOR TO COMMENCING WORK. THE RECORDING SHALL BE CLEAR WITH LOCATIONS DEFINED AND FOCUS ON EXISTING SURFACE CONDITIONS IN AN EFFORT TO ALLEVIATE PROPERTY OWNER CONFRONTAIONS AT THE CONCLUSION OF THE PROJECT.

24 INCLUDE THE COST OF ALL WYE BRANCHES, TEES AND OTHER FITTINGS FOR SEWER LINE CONSTRUCTION IN THE UNIT PRICE BID FOR PIPE.

25 MAINTAIN ACCURATE AS-BUILT RECORDS INCLUDING THE LOCATION OF MANHOLES, WYES AND ENDS OF LATERALS, AND THE ELEVATIONS OF MANHOLE INVERTS, TOP OF CASTINGS AND LATERAL DEPTHS AT THE PROPERTY LINES. AS-BUILT RECORDS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO CERTIFICATION OF COMPLETION.

26 MINIMIZE BANK EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION. PRIOR TO COMMENCING CONSTRUCTION. AN EROSION CONTROL PLAN DESCRIBING TYPES AND LOCATIONS OF EROSION CONTROL DEVICES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE EROSION CONTROL PLAN SHALL BE PREPARED IN ACCORDANCE WITH THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION PUBLICATION "EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION.

27 FIELD VERIFY THE EXISTING SEWER ELEVATIONS AND COORDINATE PLAN REVISIONS, IF REQUIRED WITH THE ENGINEER PRIOR TO COMMENCING WORK.

28 THE LOCATIONS OF WYES AND SEWER LATERALS ARE SHOWN IN GENERAL LOCATION. COORDINATE WITH THE ENGINEER ANY LOCATION OR GRADE REQUIREMENTS NECESSARY FOR THE PROPER CONNECTION OF BUILDING SEWERS TO THE SYSTEM.

29 THE QUANTITY FOR DI FITTINGS ARE DESCRIBED IN POUNDS WHICH INCLUDE GLANDS AND RESTRAINT DEVICES.

30 THE UNIT PRICE FOR "RESTORE ASPHALT" AND "RESTORE CONCRETE" SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT, SETUP AND TRAFFIC CONTROL.

31 THE UNIT PRICE FOR GRAVITY SEWERS, FORCEMAINS, AND SERVICE LATERALS SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT FOR COMPLETE EXCAVATION INCLUDING, BUT NOT LIMITED TO, BEDDING, BACKFILLING, THRUST BLOCKING, PIPE FUSION, APPURTENANCES, FLOWABLE FILL, MAINTAINING THE TRENCH, TESTING, CHECK DAMS, AND ANY OTHER LABOR OR MATERIAL REQUIRED TO COMPLETE GRAVITY SEWER LINES OR FORCE MAINS AS SPECIFIED ON THE PLANS. DUCTILE IRON PIPE GRAVITY SEWER LINES SHALL BE EPOXY LINED.

32 THE UNIT PRICE FOR BORE/JACK STEEL CASING PIPE SHALL INCLUDE, BUT NOT BE LIMITED TO, CASING PIPE, PIPE SPACERS, CASING END SEALS, ANY OTHER APPURTENANCES TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS, AND TRAFFIC CONTROL. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM.

33 THE UNIT PRICE FOR CONNECTING SEWERS TO EXISTING MANHOLE, CONNECTING SEWERS TO NEW MANHOLE, AND CONNECTING TO EXISTING FORCE MAIN SHALL INCLUDE ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR CONNECTING TO AN EXISTING FORCE MAIN, SEWER LINE, PUMP STATION OR MANHOLE AS SPECIFIED ON PLANS, INCLUDING TRAFFIC CONTROL.

34 THE UNIT PRICE FOR NEW MANHOLES SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY FOR INSTALLATION OF PRECAST MANHOLE PREFORMED BASE OR OPEN BOTTOM (DOGHOUSE) INCLUDING, BUT NOT LIMITED TO, VENT ASSEMBLY (WHERE REQUIRED), CRUSHED STONE, PIPE TO MANHOLE CONNECTORS, EXCAVATION, BACKFILL, BUTYL RESIN GASKET, MANHOLE STEPS, ASPHALTIC WATERPROOFING, FRAME AND COVER, AND TRAFFIC CONTROL.

35 THE UNIT PRICE FOR MANHOLE DROP CONNECTION ASSEMBLY SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING, BUT NOT LIMITED TO, MACHINERY, TOOLS, OR APPARATUS NECESSARY FOR INSTALLATION OF ASSEMBLIES AS DESCRIBED AND DETAILED IN THE PLANS AND SPECS.

36 THE UNIT PRICE FOR BY-PASS PUMPING SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NEEDED TO MAINTAIN CONTINUOUS OPERATION OF THE SEWER SYSTEM DURING THE CONSTRUCTION PERIOD AS REQUIRED TO COMPLETE THE WORK DEPICTED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL DETERMINE THE PUMPING RATE TO BE USED WHICH SHALL BE CONFIRMED BY THE WADC BEFORE STARTING THE DESIGN OF THE BYPASS PUMPING FACILITIES. ALL CONNECTIONS TO EXISTING MANHOLES FOR BYPASS SUCTION AND DISCHARGE PIPING SHALL BE COORDINATED WITH AND APPROVED BY THE WADC. THE CONTRACTOR SHALL SUBMIT A DETAILED TEMPORARY BYPASS PLAN IN WRITING TO THE OWNER AND ENGINEER FOR APPROVAL.

37 THE UNIT PRICE FOR REMOVE AND RETIRE IN PLACE MANHOLES AND SEWERS SHALL INCLUDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR RETIRE IN PLACE OR REMOVE ITEMS AS SPECIFIED ON THE BID FORM INCLUDING TRAFFIC CONTROL.

38 THE UNIT PRICE FOR 2IN AIR/VAC VALVE ASSEMBLY SHALL INCLUDE ALL MATERIALS, LABOR, AND EQUIPMENT INCLUDING THE CONCRETE VAULT AND ALL OTHER APPURTENANCES DEPICTED IN THE DETAIL ON SHEET U5-11.

LEGEND:

Line	Description
8" SA	PROP. SANITARY SEWER
10" FMS	PROP. FORCE MAIN
12" W	PROP. WATER LINE
2" G	PROP. GAS LINE
18" ST	PROP. STORM DRAINAGE
8" SA	EXIST. SANITARY SEWER
10" FMS	EXIST. FORCE MAIN
8" W	EXIST. WATER LINE
2" G	EXIST. GAS LINE

PROP. M.H. A-13
STA. 29+04.18

EXIST. M.H. A-14
STA. 30+92.21

PROP. STORM INLET

SEWER PLANS

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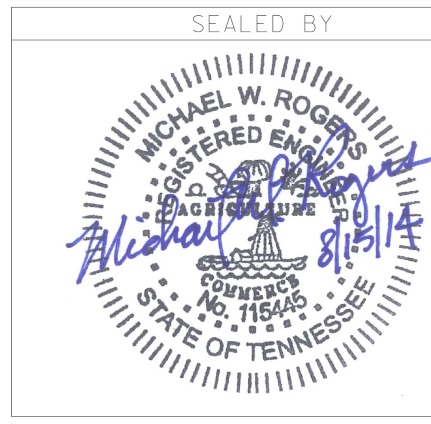

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SEWER NOTES

NTS

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-3

SUMMARY OF QUANTITIES

TDOT ITEM #	DESCRIPTION	UNIT	U5-4	U5-5	U5-6	U5-7	TOTAL	UNIT PRICE NOTES
	MATERIAL AND INSTALLATION BY THE CONTRACTOR							
797-05.02	8IN DIP GRAVITY SEWER 6FT-12FT DEPTH	L.F.	200	175	45	120	540	Sht.U5-2, Note 31
797-05.30	6IN DIP GRAVITY SEWER 6FT-12FT DEPTH	L.F.			35		35	Sht.U5-2, Note 31
797-03.16	14IN PVC FORCE MAIN	L.F.		470			470	Sht.U5-2, Note 31
797-01.11	14IN DIP FORCE MAIN (w/in Encasement)	L.F.		105			105	Sht.U5-2, Note 31
797-06.67	BORE/JACK 24IN STEEL CASING PIPE - UNCON.	L.F.		90			90	Sht.U5-2, Note 32
797-07.04	48IN MANHOLE 8FT-10FT DEPTH	EACH		3		2	5	Sht.U5-2, Note 34
797-07.05	48IN MANHOLE 10FT-12FT DEPTH	EACH	3		1		4	Sht.U5-2, Note 34
797-07.56	MANHOLE DROP CONNECTION ASSEMBLY	EACH		1			1	Sht.U5-2, Note 35
797-10.02	CONNECT 8IN SEWER TO EXIST. MANHOLE	EACH	1				1	Sht.U5-2, Note 33
797-10.09	CONNECT EX. 8IN SEWER TO NEW MANHOLE	EACH	1	2	2	1	6	Sht.U5-2, Note 33
797-10.08	CONNECT EX. 6IN SEWER TO NEW MANHOLE	EACH			1		1	Sht.U5-2, Note 33
797-10.21	CONNECT TO 14IN FORCE MAIN	EACH		2			2	Sht.U5-2, Note 33
797-07.80	REMOVE SEWER MANHOLE	EACH		1		1	2	Sht.U5-2, Note 37
797-11.25	RETIREIN PLACE 48" MANHOLE	EACH	1		1		2	Sht.U5-2, Note 37
797-11.31	RETIREIN PLACE EXISTING SEWER 8IN-14IN	L.F.	180			125	305	Sht.U5-2, Note 37
797-08.01	DI FITTINGS	LBS.		3000			3000	Sht.U5-2, Note 29
797-11.38	BY-PASS PUMPING	LS	1	1	1	1	4	Sht.U5-2, Note 36
797-11.40	RESTORE ASPHALT	S.Y.	80	140	39	91	350	Sht.U5-2, Note 30
797-11.41	RESTORE CONCRETE	S.Y.			320		320	Sht.U5-2, Note 30
797-09.26	2IN AIR/VAC VALVE ASSEMBLY	L.S.		1			1	Sht.U5-2, Note 38

SEWER PLANS

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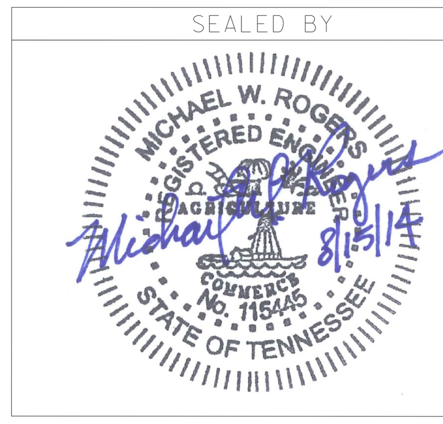

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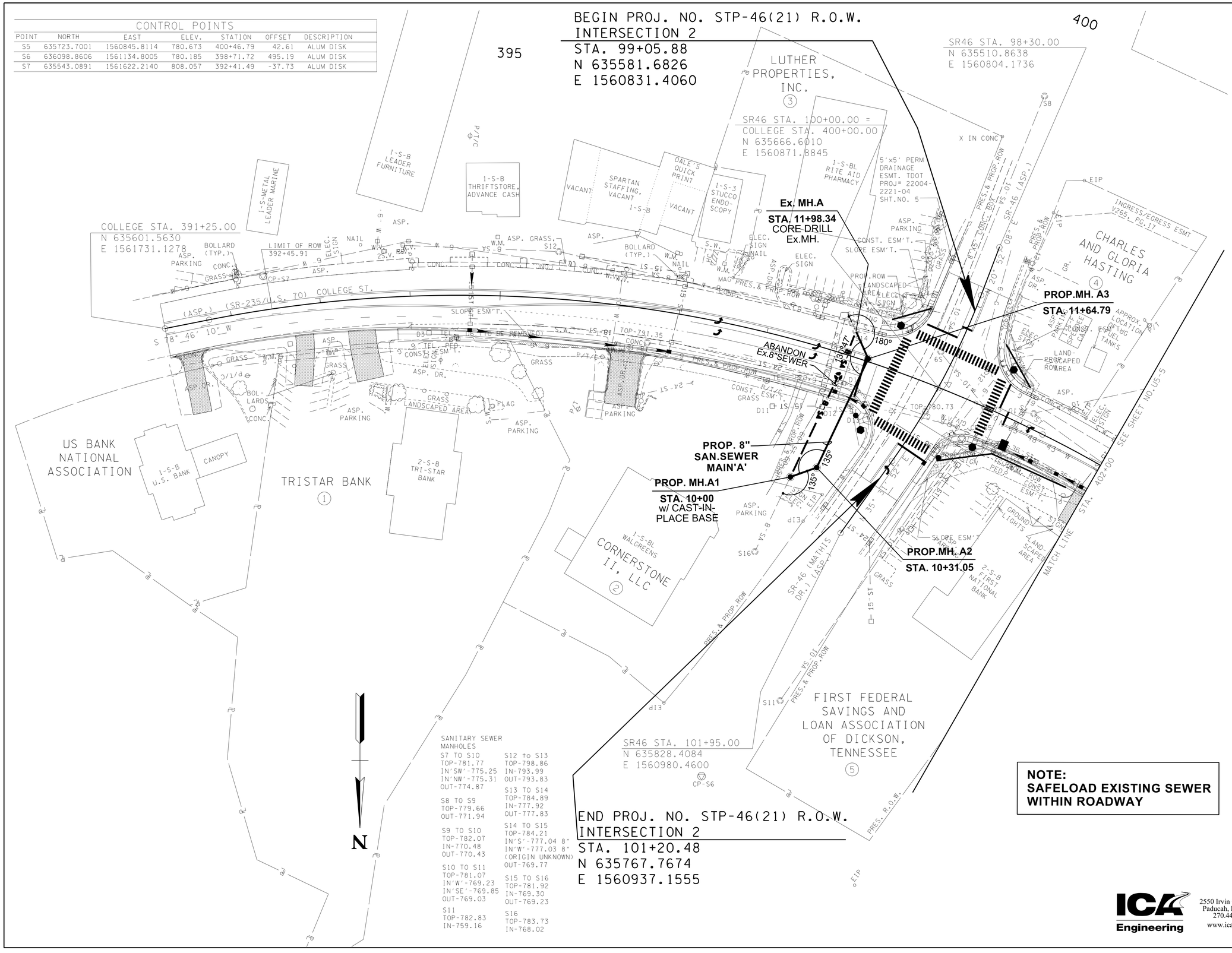
SEWER QUANTITIES

NTS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-4

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S5	635723.7001	1560845.8114	780.673	400+46.79	42.61	ALUM DISK
S6	636098.8606	1561134.8005	780.185	398+71.72	495.19	ALUM DISK
S7	635543.0891	1561622.2140	808.057	392+41.49	-37.73	ALUM DISK



SANITARY SEWER MANHOLES

S7 TO S10
TOP-781.77
IN'SW'-775.25
IN'NW'-775.31
OUT-774.87

S8 TO S9
TOP-779.66
OUT-771.94

S9 TO S10
TOP-782.07
IN-770.48
OUT-770.43

S10 TO S11
TOP-781.07
IN'W'-769.23
IN'SE'-769.85
OUT-769.03

S11
TOP-782.83
IN-759.16

S12 to S13
TOP-798.86
IN-793.99
OUT-793.83

S13 TO S14
TOP-784.89
IN-777.92
OUT-777.83

S14 TO S15
TOP-784.21
IN'S'-777.04 8"
IN'W'-777.03 8"
(ORIGIN UNKNOWN)
OUT-769.77

S15 TO S16
TOP-781.92
IN-769.30
OUT-769.23

S16
TOP-783.73
IN-768.02

END PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 2
STA. 101+20.48
N 635767.7674
E 1560937.1555

NOTE:
SAFELOAD EXISTING SEWER WITHIN ROADWAY

SEWER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
No. 115449
STATE OF TENNESSEE
8/15/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT
INTERSECTION NO. 2
STA.391+25 TO STA.402+00
SCALE: 1"= 50'

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10/7/2014 2:01:05 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\S004.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-5

SANITARY SEWER MANHOLES

S1 TO S2
TOP-810.81
OUT-804.75

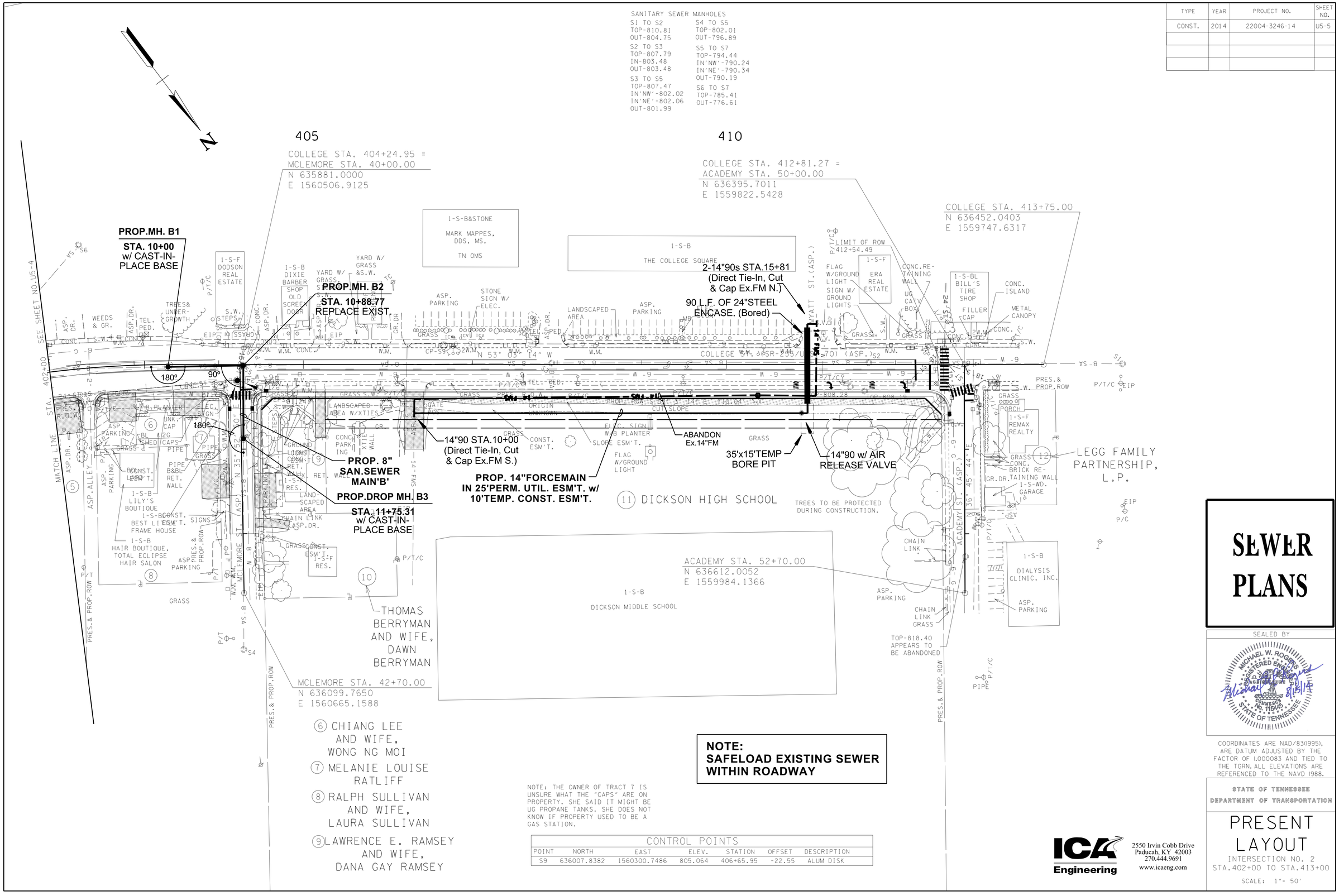
S2 TO S3
TOP-807.79
IN-803.48
OUT-803.48

S3 TO S5
TOP-807.47
IN'NW'-802.02
IN'NE'-802.06
OUT-801.99

S4 TO S5
TOP-802.01
OUT-796.89

S5 TO S7
TOP-794.44
IN'NW'-790.24
IN'NE'-790.34
OUT-790.19

S6 TO S7
TOP-785.41
OUT-776.61



NOTE:
SAFELOAD EXISTING SEWER WITHIN ROADWAY

NOTE: THE OWNER OF TRACT 7 IS UNSURE WHAT THE "CAPS" ARE ON PROPERTY. SHE SAID IT MIGHT BE UG PROPANE TANKS. SHE DOES NOT KNOW IF PROPERTY USED TO BE A GAS STATION.

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S9	636007.8382	1560300.7486	805.064	406+65.95	-22.55	ALUM DISK

SEWER PLANS

SEALED BY

MICHAEL W. ROGERS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 115449 STATE OF TENNESSEE
8/13/14

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT
INTERSECTION NO. 2
STA.402+00 TO STA.413+00
SCALE: 1"= 50'

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10/7/2014 4:59:40 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\S005.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-6

STORM DRAINAGE STRUCTURES

D1
TOP-851.57
OUT-849.08
15"RCP

D2
TOP-851.27
IN-848.07
15"RCP
BOT-847.62
OUT-847.53
18"RCP

D3 (TO BE REMOVED)
TOP-854.97
IN-'SW'-844.66
18"RCP
IN'NW'-851.17
18"RCP
BOT-840.77
OUT-840.76
18"RCP

D4
INV-852.34
8"PVC W/
STONE EW

D5
INV-851.18
18"RCP
W/CONC. EW

D6
INV-854.22
W/CONC. EW

D7
INV-852.77
W/CONC. EW

D8
INV-858.58
W/CONC. EW

D9
INV-859.25
W/CONC. EW

D10
TOP-854.35
OUT-840.54
18"RCP

D11
TOP-863.19
OUT-859.88
18"RCP

D12
INV-875.83
18"CMP

D13
INV-872.76
18"CPP

D14
INV-869.54

D15
INV-867.57

D16
INV-868.79

D17
NOT FOUND
APPROX.
LOC. SHOWN

D18
INV-864.90
W/CONC. EW
22"X14" RCP

D19
INV-863.66
W/CONC. EW
22"X14" RCP

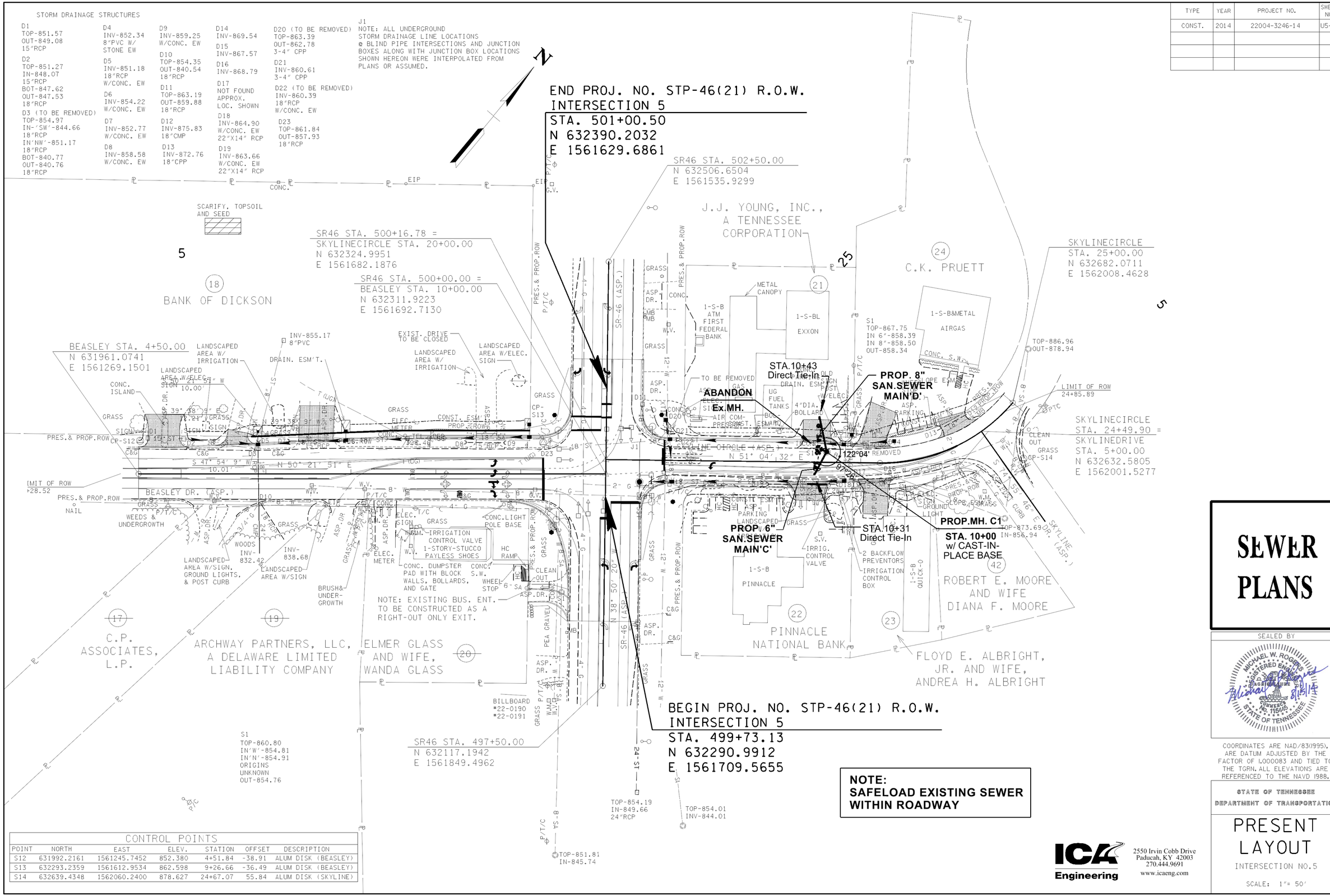
D20 (TO BE REMOVED)
TOP-863.39
OUT-862.78
3-4" CPP

D21
INV-860.61
3-4" CPP

D22 (TO BE REMOVED)
INV-860.39
18"RCP
W/CONC. EW

D23
TOP-861.84
OUT-857.93
18"RCP

J1
NOTE: ALL UNDERGROUND
STORM DRAINAGE LINE LOCATIONS
& BLIND PIPE INTERSECTIONS AND JUNCTION
BOXES ALONG WITH JUNCTION BOX LOCATIONS
SHOWN HEREON WERE INTERPOLATED FROM
PLANS OR ASSUMED.



NOTE:
SAFELOAD EXISTING SEWER
WITHIN ROADWAY

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S12	631992.2161	1561245.7452	852.380	4+51.84	-38.91	ALUM DISK (BEASLEY)
S13	632293.2359	1561612.9534	862.598	9+26.66	-36.49	ALUM DISK (BEASLEY)
S14	632639.4348	1562060.2400	878.627	24+67.07	55.84	ALUM DISK (SKYLINE)

SEWER PLANS

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.5

SCALE: 1"= 50'

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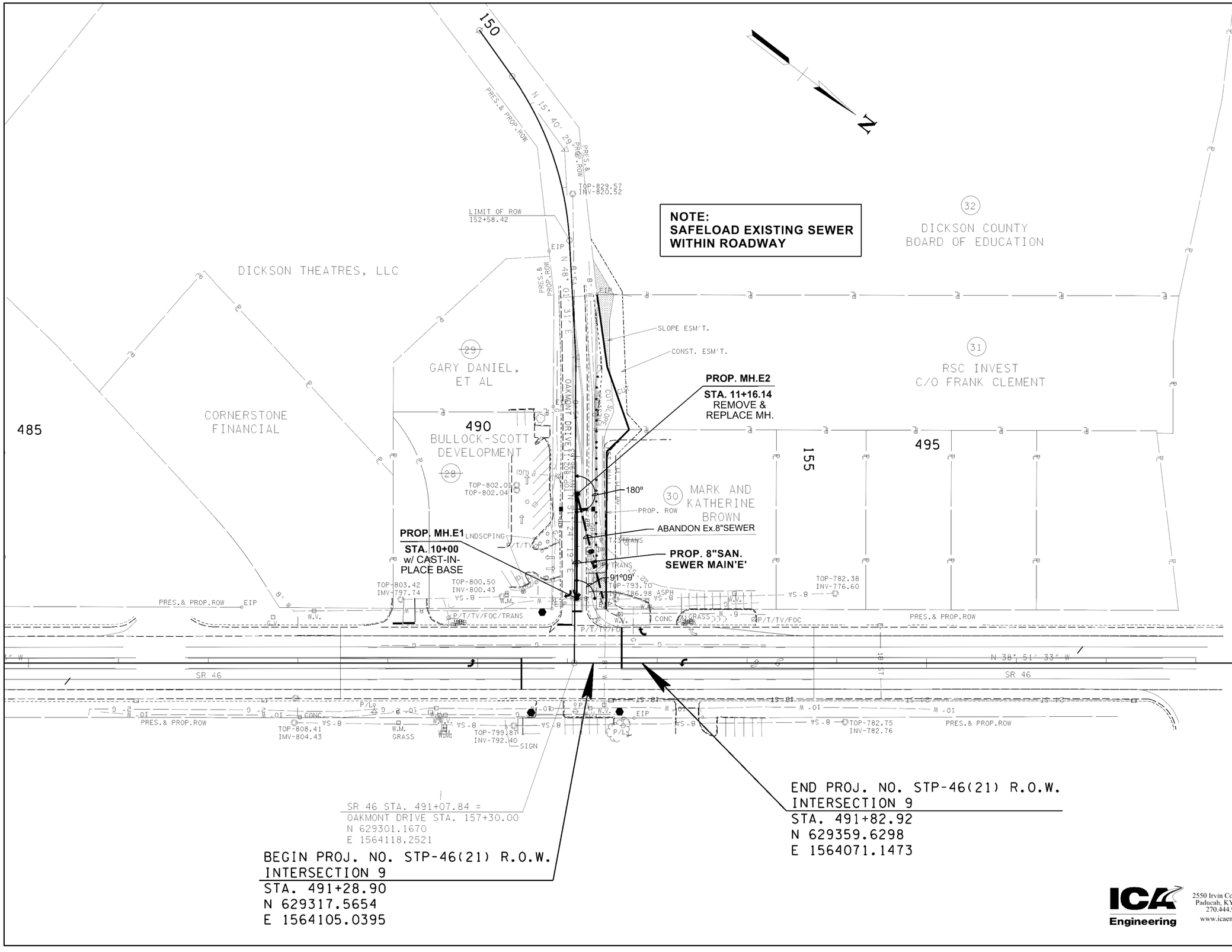
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\S006.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-7



SEWER PLANS

SEALED BY

MICHAEL W. ROGERS
REGISTERED ENGINEER
No. 115445
STATE OF TENNESSEE
8/18/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.9

SCALE: 1"= 50'

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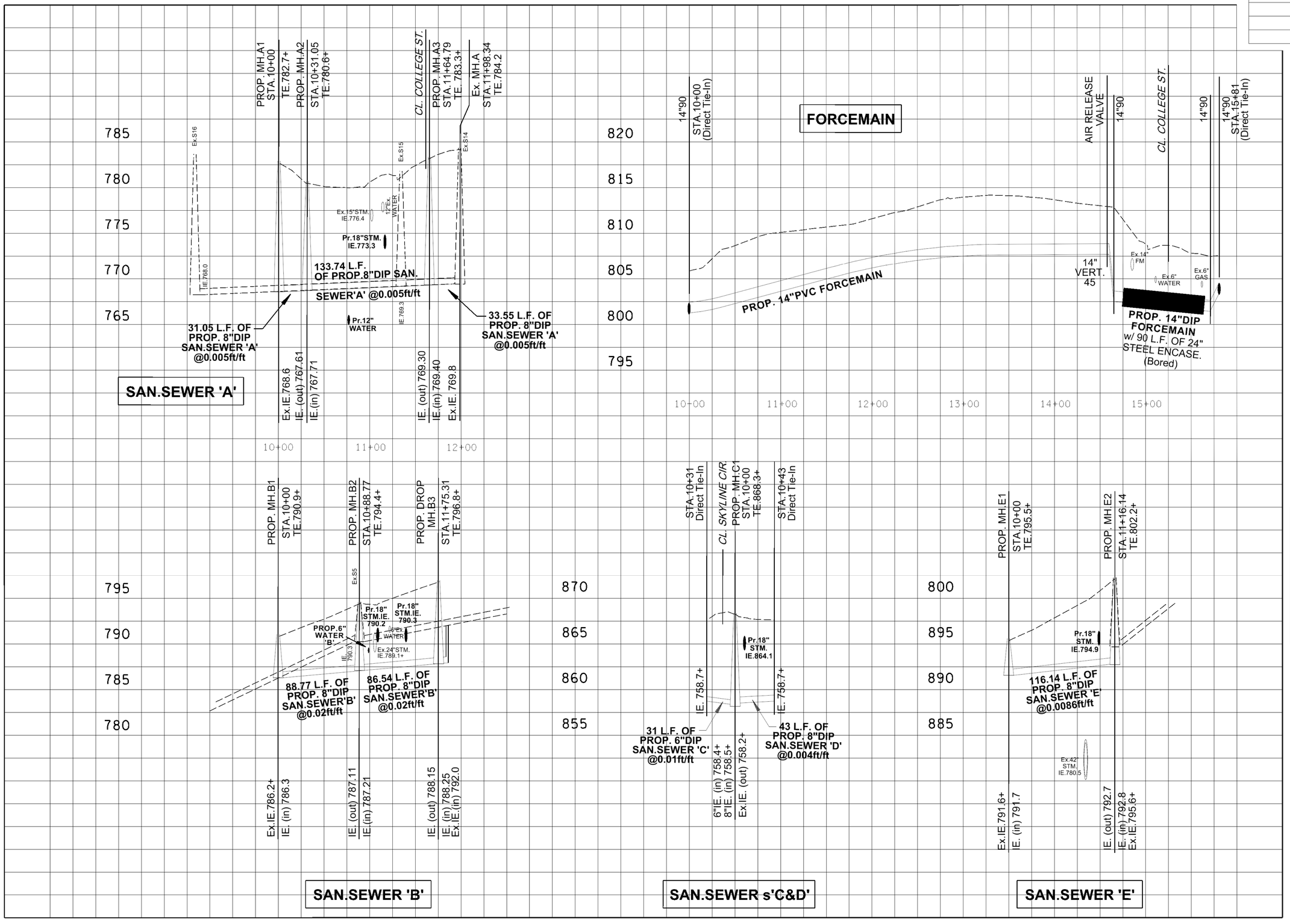
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\S007.SHT

CONST.	2014	22004-3246-14	U5-8



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270.444.9691
www.icaeng.com

SEWER PLANS

SEALED BY

MICHAEL W. ROGERS REGISTERED ENGINEER AGRICULTURE COMMERCE No. 115445 STATE OF TENNESSEE

Michael W. Rogers 8/15/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

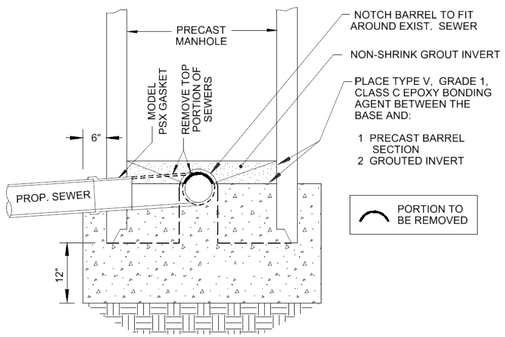
PROFILE

SEWER MAINS 'A-E'

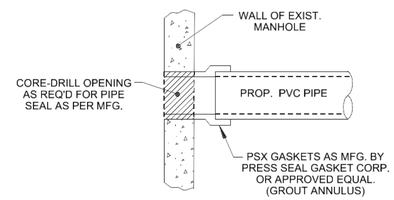
SCALE: 1"=5' VERT.
1"= 50'HORIZ.

8/18/2014 1:22:33 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\S008 Profiles.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-9



CAST-IN-PLACE MANHOLE BASE



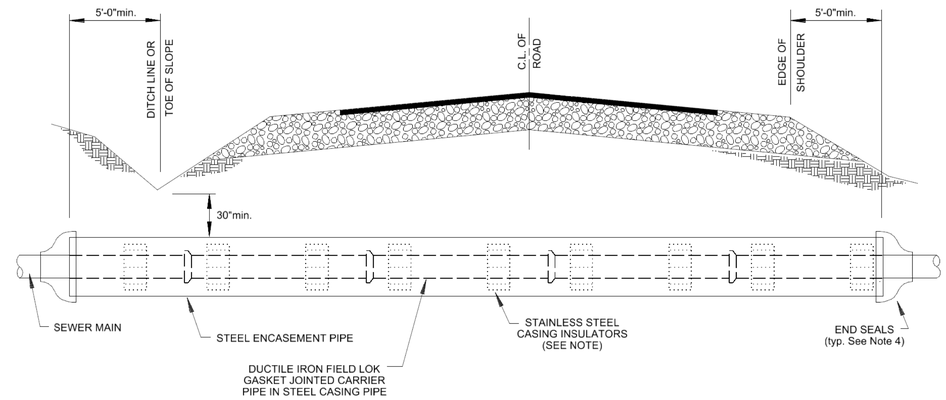
CORE-DRILL EXIST. MANHOLE

NOTES:

INSTALL PIPE SEALS IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS.

ALL PENETRATION OF EXIST. MANHOLES SHALL BE IN ACCORDANCE WITH THIS DETAIL.

PAYMENT SHALL BE BASED UPON THE SIZE OF THE PROPOSED PIPE TO BE TIED IN AND NOT THE SIZE OF THE CORE-DRILLED HOLE.



STEEL CASING & CARRIER PIPE (BORE)

NOTES:

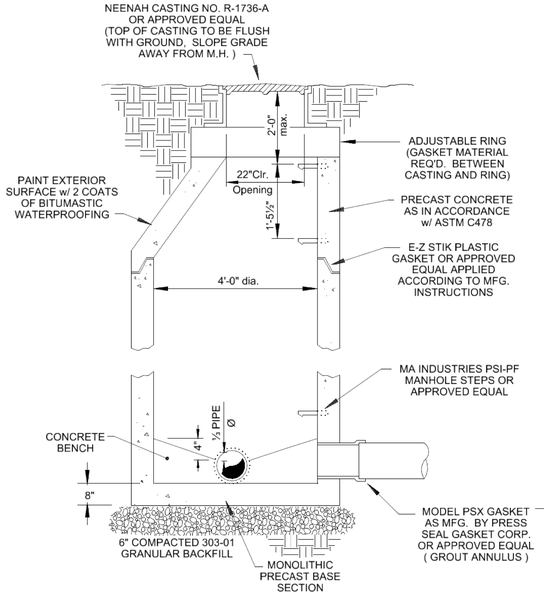
EXCAVATION BETWEEN DITCH LINES OR WITHIN 5'-0" OF THE SHOULDER IF THERE IS NO DITCH IS PROHIBITED. VERIFY THE LENGTH OF ENCASEMENT AT EACH ROADWAY CROSSING AND NOTIFY THE ENGINEER PRIOR TO INSTALLATION, IF THE LENGTH NOTED ON THE PLANS IS INSUFFICIENT.

INSTALL FIELD LOK GASKETS WITHIN ALL ENCASEMENT PIPE AND ONE PIPE LENGTH OUTSIDE OF THE CASING ON BOTH ENDS.

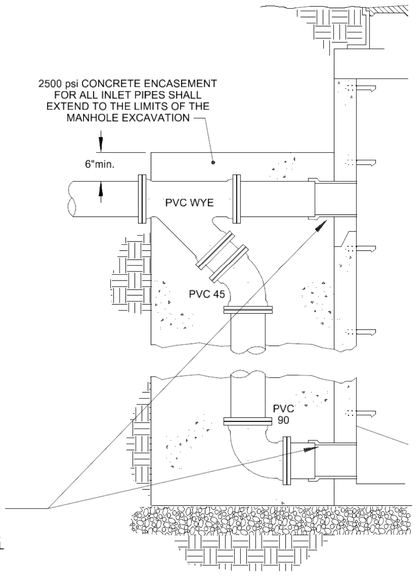
CASING INSULATORS SHALL BE MODEL S8G-2 AS MFR. BY PSI, 6525 GOFORTH ST., HOUSTON, TX. 77021 OR EQUIVALENT. SPACE AT 6'-0"max. C/C.

CASING SEALS SHALL BE MODEL 'S' AS MFR. BY PSI OR EQUIVALENT.

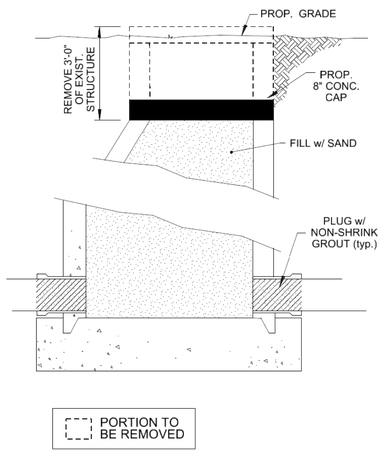
THE UNIT PRICE FOR STEEL ENCASEMENT SHALL INCLUDE ALL ACCESSORY ITEMS SUCH AS CASING SKIDS, CASING SEALS, & JOINT RESTRAINT GASKETS. THE UNIT PRICE FOR BORE & JACKED STEEL ENCASEMENT SHALL ALSO INCLUDE THE LINEAR FOOT OF CARRIER PIPE.



PRECAST MANHOLE



w/ DROP INLET



EXIST. MANHOLE RETIRED

SEWER PLANS

SEALED BY

MICHAEL W. ROGERS REGISTERED ENGINEER CIVIL ENGINEERING No. 115485 STATE OF TENNESSEE

8/13/14

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

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SEWER DETAILS

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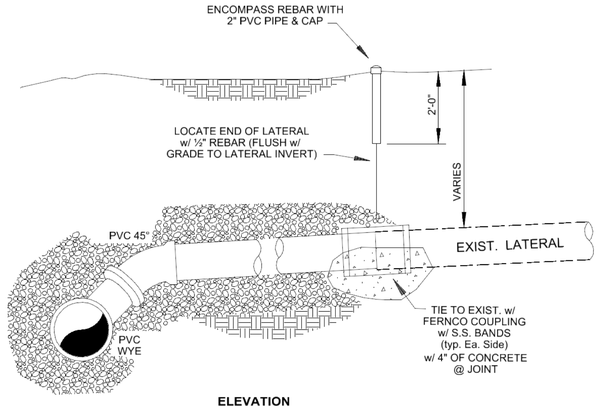
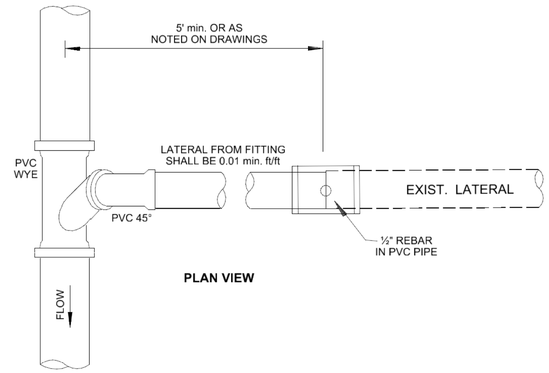
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\S009 Details.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-10



ELEVATION

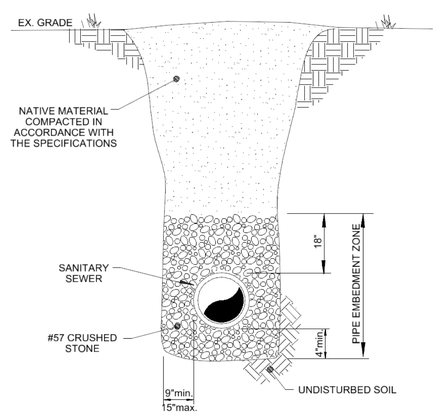


PLAN VIEW

SERVICE LATERAL w/ NO CLEANOUT

NOTE:

FOR NEW CONSTRUCTION OMIT CLEANOUT BOX AND EXTEND 6" PVC ABOVE GRADE 48" AND INSTALL SOLVENT CAP.



SANITARY SEWER TRENCH
(Unimproved)

NOTES:

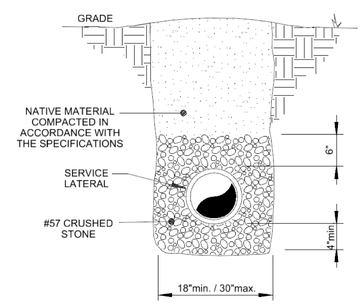
#57 CRUSHED STONE BEDDING, WYES AND TEES SHALL BE INCIDENTAL TO THE COST PER LINEAR FOOT OF SEWER.

TRENCH WIDTH ABOVE THE PIPE EMBEDMENT ZONE SHALL BE THE MINIMUM ALLOWABLE TO SAFELY AND PRACTICALLY INSTALL THE SEWER. REFER TO ASTM D2321 FOR MINIMUM WIDTH REQUIREMENTS.

MATERIAL WITHIN THE PIPE EMBEDMENT ZONE SHALL BE PLACED AGAINST UNDISTURBED SOIL.

THIS DETAIL SHALL BE APPLICABLE WHERE THE PROP. SEWER MAIN IS TO BE INSTALLED IN AREAS OUTSIDE THE LIMITS OF IMPROVED SURFACES

THE MINIMUM THICKNESS OF BEDDING SHALL BE INCREASED TO 6" WHEN ROCK IN ENCOUNTERED AT SUBGRADE ELEVATION.



SERVICE LATERAL TRENCH
(Unimproved)

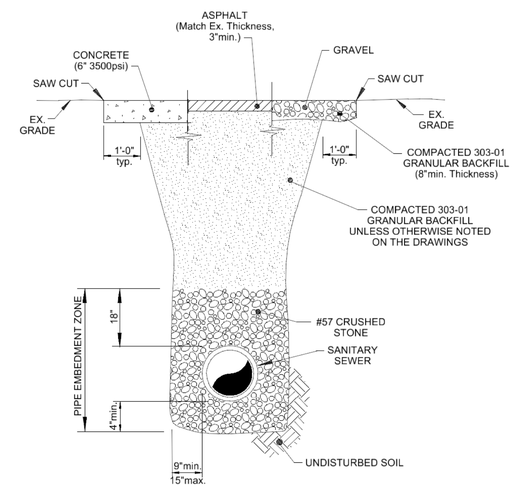
NOTES:

#57 CRUSHED STONE BEDDING SHALL BE INCIDENTAL TO THE COST PER LINEAR FOOT OF LATERAL.

TRENCH WIDTH ABOVE THE PIPE EMBEDMENT ZONE SHALL BE THE MINIMUM ALLOWABLE TO SAFELY AND PRACTICALLY INSTALL THE LATERAL. REFER TO ASTM D2321 FOR MINIMUM WIDTH REQUIREMENTS.

MATERIAL WITHIN THE PIPE EMBEDMENT ZONE SHALL BE PLACED AGAINST UNDISTURBED SOIL.

THE MINIMUM THICKNESS OF BEDDING SHALL BE INCREASED TO 6" WHEN ROCK IN ENCOUNTERED AT SUBGRADE ELEVATION.



SANITARY SEWER TRENCH
(Improved)

NOTES:

#57 CRUSHED STONE BEDDING SHALL BE INCIDENTAL TO THE COST PER LINEAR FOOT OF SEWER.

TRENCH WIDTH ABOVE THE PIPE EMBEDMENT ZONE SHALL BE THE MINIMUM ALLOWABLE TO SAFELY AND PRACTICALLY INSTALL THE SEWER. REFER TO ASTM D2321 FOR MINIMUM WIDTH REQUIREMENTS.

MATERIAL WITHIN THE PIPE EMBEDMENT ZONE SHALL BE PLACED AGAINST UNDISTURBED SOIL.

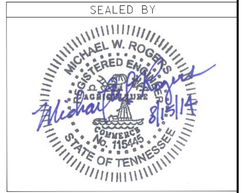
THIS DETAIL SHALL BE APPLICABLE WHERE THE PROP. SEWER MAIN IS TO BE INSTALLED WITHIN THE LIMITS OF DRIVEWAY PAVEMENT OR SIDEWALK TO 2'-0" BEHIND BACK OF CURB OR EDGE OF PAVEMENT.

THE MAXIMUM WIDTH OF THE TRENCH SHALL BE LIMITED TO FOUR (4) FEET WHERE COMPACTED SELECT FILL IS USED UNLESS APPROVED OTHERWISE BY THE ENGINEER.

THE MINIMUM THICKNESS OF BEDDING SHALL BE INCREASED TO 6" WHEN ROCK IS ENCOUNTERED AT SUBGRADE ELEVATION.

SEWER PLANS

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

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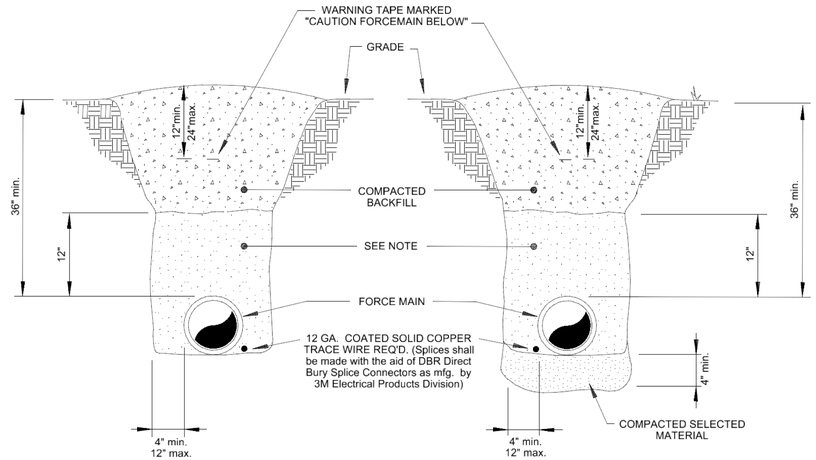
SEWER DETAILS

8/18/2014 12:32:26 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\SOIO Details 2.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U5-11

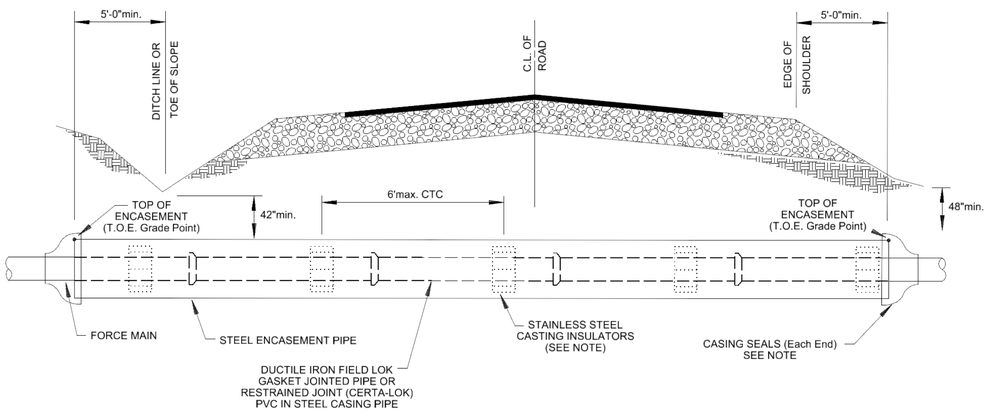


TRENCH SECTION IN SOIL **TRENCH SECTION IN ROCK**

NOTES:

COMPACTED BACKFILL SHALL BE PLACED TO A ONE FOOT min. DEPTH OF COVER. THE INITIAL BACKFILL SHALL BE A MATERIAL FREE FROM ROCKS GREATER THAN ½" DIA., SOIL CLODS, OR FROZEN MATERIAL. IF AUTOMATIC TAMPERS ARE USED, CARE SHALL BE EXERCISED TO AVOID DAMAGE TO THE PIPE.

COST ASSOCIATED WITH ITEMS DEPICTED IN THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE FOR FORCEMAIN.



STEEL ENCASEMENT & CARRIER PIPE

NOTES :

EXCAVATION BETWEEN DITCH LINES OR WITHIN 5'-0" OF THE SHOULDER IF THERE IS NO DITCH IS PROHIBITED. VERIFY THE LENGTH OF ENCASEMENT AT EACH ROADWAY CROSSING AND NOTIFY THE ENGINEER PRIOR TO INSTALLATION IF THE LENGTH NOTED ON THE PLANS IS INSUFFICIENT.

INSTALL FIELD LOK GASKETS WITHIN ALL ENCASEMENT PIPE AND ONE PIPE LENGTH OUTSIDE OF THE CASING ON BOTH ENDS.

ALL DIP FORCE MAIN WITHIN STEEL ENCASEMENT SHALL BE POLY-WRAPPED IN ACCORDANCE WITH THE DETAIL PROVIDED.

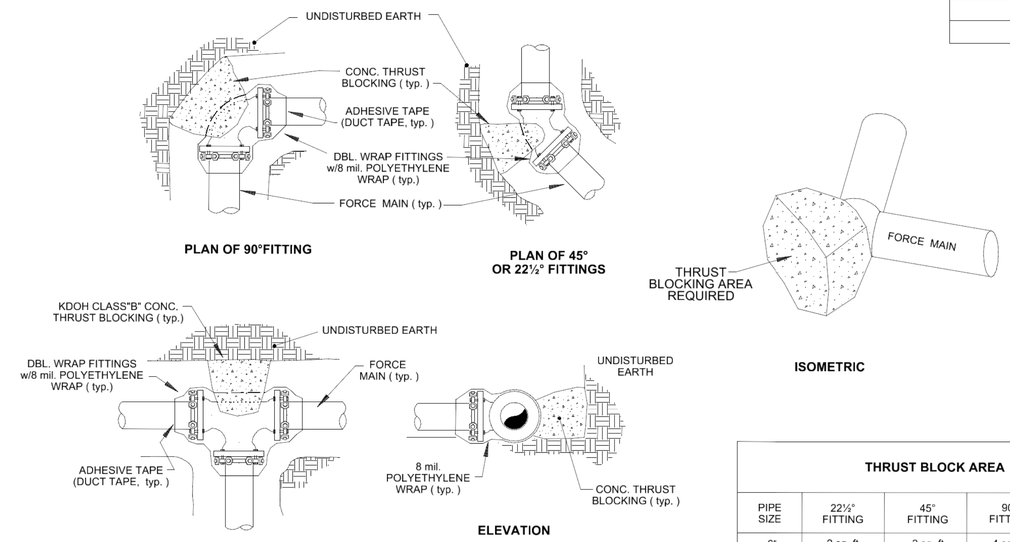
ALL PVC FORCE MAIN WITHIN STEEL ENCASEMENT AND ONE PIPE SECTION EACH SIDE SHALL BE RESTRAINED JOINT YELOMINE PVC (CERTA-LOK OR APPROVED EQUAL).

CASING INSULATORS SHALL BE MODEL S8G-2 AS MFR. BY PSI, 6525 GOFORTH ST., HOUSTON, TX. 77021 OR EQUIVALENT. SPACE AT 6'-0"max. C/C.

CASING SEALS SHALL BE MODEL "S" AS MFR. BY PSI OR EQUIVALENT.

THE UNIT PRICE FOR STEEL ENCASEMENT SHALL INCLUDE ALL ACCESSORY ITEMS SUCH AS CASING SKIDS, CASING SEALS, & JOINT RESTRAINT GASKETS.

FINISHED STEEL ENCASEMENT PRODUCT SHALL BE INSTALLED WITHIN 6" OF GRADE POINT ELEVATIONS OR WITHIN 6" OF GRADE POINTS AS PRIOR AGREED BY FIELD ENGINEER.



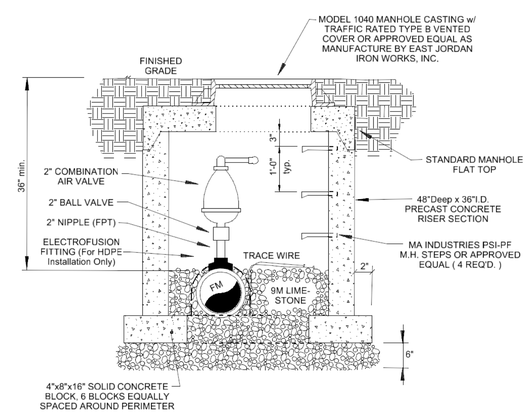
THRUST BLOCK AREA				
PIPE SIZE	22½° FITTING	45° FITTING	90° FITTING	TEES
6"	2 sq. ft.	3 sq. ft.	4 sq. ft.	4 sq. ft.
8"	3 sq. ft.	4 sq. ft.	8 sq. ft.	8 sq. ft.
10"	4 sq. ft.	6½ sq. ft.	12 sq. ft.	12 sq. ft.
12"	5 sq. ft.	9 sq. ft.	16 sq. ft.	16 sq. ft.
16"	8 sq. ft.	16 sq. ft.	29 sq. ft.	29 sq. ft.
18"	12 sq. ft.	20 sq. ft.	35 sq. ft.	35 sq. ft.

MECHANICAL JOINT PIPE THRUST BLOCKING

NOTES:

PROVIDE THRUST RESTRAINT GLANDS BY EBBA IRON OR APPROVED EQUAL FOR ALL MECHANICAL JOINT FITTINGS.

COST ASSOCIATED WITH POLY WRAP AND TAPE SHALL BE INCLUDED AS INCIDENTAL TO THE UNIT PRICE FOR MECHANICAL JOINT FITTINGS.



AIR RELEASE VALVE & VAULT

NOTES:

12 GA. COATED SOLID COPPER TRACE WIRE TO BE EXTENDED 30" INTO THE VAULT.

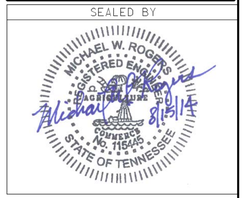
COMBINATION AIR VALVE SHALL BE A 2" MODEL D-025 AS MANUFACTURED BY A.R.I. FLOW CONTROL ACCESSORIES OR ENGINEER APPROVED EQUAL.

UNLESS DIRECTED OTHERWISE BY THE ENGINEER, RISER AND BALL VALVE SHALL BE STAINLESS STEEL.

COST ASSOCIATED WITH ITEMS DEPICTED IN THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE FOR AIR RELEASE VALVE AND VAULT.

SEWER PLANS

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ICA Engineering
2550 Irvin Cobb Drive
Paducah, KY 42003
270.444.9691
www.icaeng.com

FORCEMAIN DETAILS

8/18/2014 12:23:54 PM
E:_2014 JOBS\14077 Dickson County\Dwgs\SEWER\SOILFM Details 1.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U6-1

Federal Project No.: STP-46(21)
State Project No.: 22004-3246-14
Route: State Route 46 Intersection Improvements From I-40 to SR-1 (US-70, Henslee Drive), Including the Intersection of SR-1 at SR-1 (East College Street)
County: Dickson

Submitted By: Kenneth Kornegay (AT&T), Ted Archie (Nextera Consultants, LLC)

Utility Office Contact: Kenneth Kornegay

Index Of Sheets

SHEET NO. DESCRIPTION

U6-1 .....COVER SHEET
U6-2 - U6-3 .....SPECIFICATIONS
U6-4 - U6-8 .....PRESENT LAYOUT

GENERAL NOTES TO CONTRACTOR. ADDITIONAL DETAILS SHEETS #2 AND #3

DAMAGES TO EXISTING UTILITIES

REPAIRS AND/OR REPLACEMENTS TO ANY UTILITIES DAMAGED BY CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL PAYMENT WILL BE ALLOWED.

AERIAL CABLE & GUY WIRES

THESE FACILITIES WILL BE PLACED BY AT&T. ROAD CONTRACTOR IS TO PROVIDE AND PLACE ALL PROPOSED AT&T POLES. ANCHORS AND BURIED CONDUIT. SEE THE POWER COMPANY DESIGN LAYOUT FOR PROPOSED POLE LOCATIONS AND POLE REMOVALS UNLESS SPECIFIED ON THESE DRAWINGS.

STAKING PROPOSED FACILITIES

NOTIFY KENNETH KORNEGAY @ (615) 848-2082 TWO WEEKS IN ADVANCE FOR ARRANGEMENTS TO HAVE THE PROPOSED POLE AND ANCHOR LOCATIONS STAKED. NOTE THAT THIS WILL HAVE TO BE COORDINATED WITH THE POWER COMPANY. THE CONTRACTOR WILL NEED TO HAVE THE TDOT R.O.W. STAKED AND ANY LINE-OF-SIGHT OBSTRUCTIONS REMOVED. IN ORDER. FOR THE PROPOSED POLE LINE TO BE STAKED PROPERLY.

ANCHOR PLACEMENT GUIDELINES

SEE DETAILS SHEET #2.FOR PLACEMENT INSTRUCTIONS.

TRENCHING AND BURIED FACILITY PLACEMENT GUIDELINES

THE BOTTOM OF THE TRENCH SHOULD BE RELATIVELY SMOOTH. UNDISTURBED EARTH. IT SHOULD BE WELL TAMPERED. OR IT CAN BE SAND. WHEN EXCAVATION IS IN ROCK OR ROCKY SOILS. THE CONDUIT SHOULD BE LAID ON A PROTECTIVE LAYER OF WELL-TAMPED BACKFILL. BACKFILL WITHIN 4 INCHES OF THE CONDUIT SHOULD BE FREE OF MATERIALS THAT MAY DAMAGE THE CONDUIT. BACKFILL SHOULD BE ADEQUATELY COMPACTED. MACHINE COMPACTION SHOULD NOT BE USED WITHIN 6 INCHES OF THE CONDUIT. THE FIRST 6 INCHES OF FILL DIRECTLY ABOVE THE CONDUIT MUST BE CLEAN SAND OR SOIL. THE FILL SHOULD BE FREE OF ROCKS. PAVEMENT AND FROZEN MATERIAL THAT MIGHT DAMAGE CONDUIT.

POLE PLACEMENT GUIDELINES

SEE DETAILS SHEET #2. FOR POLE SETTING DEPTHS. ALL POLES SHOULD BE SOUTHERN PINE WITH PRESERVATIVE TREATMENT OF PENTACHLOROPHENOL IN PRETROLEUM.

ESTIMATED UTILITY QUANTITIES

TELEPHONE QUANTITIES		100% PROJ / 0% UTILITY	
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
793-01.08	POLE 35FT CLASS 5 WOOD	EACH	2
793-01.41	ANCHOR 1IN	EACH	19
793-13.07	4IN SCHEDULE 40 PVC	L.F.	23,515
793-13.11	1 DUCT FORMATION @ 24IN DEPTH	L.F.	590
793-13.22	3 DUCT FORMATION @ 36IN DEPTH	L.F.	100
793-13.27	4 DUCT FORMATION @ 36IN DEPTH	L.F.	25
793-13.37	9 DUCT FORMATION @ 36IN DEPTH	L.F.	1,725
793-13.47	16 DUCT FORMATION @ 36IN DEPTH	L.F.	70
793-14.03	MH PRECAST 6-FT W X 12-FT L X 7-FT H	EACH	5
793-14.20	PLACE MANHOLE OVER EXISTING CABLE	EACH	3
793-16.01	MH(RETIRE/REMOVE/GRAVEL BACKFILL)	EACH	4
793-13.42	12 DUCT FORMATION @ 36IN DEPTH	L.F.	490
793-98.04	REMOVE POLES ALL SIZES	EACH	7

AT&T

Construction Work Drawing

PROPRIETARY INFORMATION
Not for disclosure outside AT&T or any of its subsidiaries except under written agreement

State: TENNESSEE
District: MIDDLE TN
Exchange: DICKSON

AT&T Designer: Kenneth Kornegay
Phone: (615)848-2082
Consultant:
Nextera Consultants, LLC
Phone: (615)708-7549
Ted Archie, Designer
Robert S. Stitcher, P.E.

ROBERT S. STITCHER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 112311
STATE OF TENNESSEE

8/20/2014

Job Description:

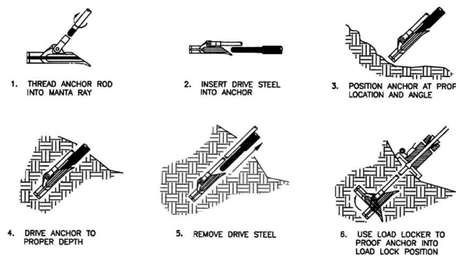
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-1 OF U6-8

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

AT&T COVER SHEET

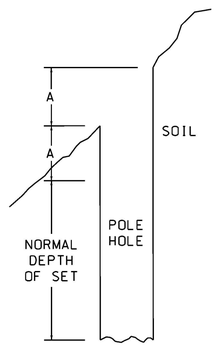
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U6-2



DETAIL--PLACE POLES

DEPTH OF SETTING HOLES

LENGTH OF POLE (FT)	DEPTH OF SET (FT)	
	FIRM EARTH	SOLID ROCK
20	4	3
25	5	3
30	5-1/2	3-1/2
35-40	6	4
45	6-1/2	4-1/2
50	7	4-1/2
55	7-1/2	5
60	8	5
65	8-1/2	6
70	9	6
75	9-1/2	6
80	10	7
85	10-1/2	7
90-100	11	7
105-125	12	8



IN SLOPING GROUND, INCREASE THE DEPTH OF SET BY AMOUNT A AS SHOWN

Manta–Ray anchor specifications

The B drive type anchor in the MR "Manta-Ray" series is available in four different sizes for use in various soil conditions. The description of various soil classes is listed below.

- Class 1 - Extremely hard; bedrock.
- Class 2 - Very hard; dense clay, compact gravel, dense fine sand, laminated rock, slate, schist, sandstone.
- Class 3 - Hard; shale, broken bedrock, hardpan, compact clay-gravel mixture.
- Class 4 - Gravel, compact gravel and sand, claypan.
- Class 5 - Medium firm clay, loose sand and gravel, compact coarse sand.

The table below displays a description of the Manta-Ray anchor sizes, their holding capacities, and intended soil usage.

Reference: See BSP 621-415-205BT (B Drive Type Earth Anchor) for additional information about this topic.

Soil Class	Anchor Model	Rod Size	Marking	Eye Nut	Guy Loading
2	MR-1	1"	32M	Triple	Up to 32M
	MR-2	5/8"	12M	Double	Up to 12M
	MR-3	—	—	—	—
	MR-4	—	—	—	—
3	MR-1	1"	32M	Triple	Up to 32M
	MR-2	5/8"	12M	Double	Up to 12M
	MR-3	—	—	—	—
	MR-4	—	—	—	—
4	MR-1	1"	32M	Triple	Up to 32M
	MR-2	3/4"	18M	Double	Up to 18M
	MR-3	5/8"	6M	Double	Up to 6M
	MR-4	—	—	—	—
5	MR-1	1"	32M	Triple	Up to 32M
	MR-2	3/4"	18M	Double	Up to 18M
	MR-3	5/8"	6M	Double	Up to 6M
	MR-4	—	—	—	—

NOTE: ALL DETAILS AND NOTES ON THIS SHEET PROVIDED BY AT&T FOR USE ON THIS PROJECT

INSTALLATION EQUIPMENT
Drive Steel: Drive steel and accessories are available from Foresight Products for all Manta Ray and Stingray anchors in basic lengths of 3 feet, 6 feet, and 8 feet. Multiple sections are coupled together with specialized couplers to achieve the required depth of installation. Manta Ray and Stingray drive steel are not interchangeable.

Load Locking Kits For Manta Ray, the LL-1 is a 10-ton fast acting jack with an 8-inch stroke. The direct reading gauge and rod gripping jaws make load locking easy and quick. For high capacity Stingrays, the LL-40 is a 20-ton jack with a 10-inch stroke. The base and jack are self-aligning to the actual installed angle of the anchor. Both kits require open center hydraulic flow of 2 to 8 gallons per minute and a maximum pressure of 2,000 psi. A power supply is not included with these load-locking kits, it must be provided separately. Foresight Products models GPU18-8 or GPU-2 are suitable for the LL-1. GPU18-8 is required for the LL-40.

Manual Installation

UTILITY GUY ANCHORING SYSTEM: QUICK, EASY, SAFE INSTALLATION
Anchor rod is screwed into the threaded shackle of the anchor and the first section (radius drive tip) of the drive steel set is inserted into the anchor. One man at ground level using a standard jack hammer drives the MANTA RAY into the soil at the desired angle and depth. Installer pulls the drive steel out of the ground and screws adaptor setting bar onto the end of the anchor rod. Anchor locker base and hydraulic ram system are placed over adapter setting bar. Power source operates the anchor locker, gripping the adapter setting bar, rotating the anchor underground into its locked position, proof loading anchor to the holding capacity required.
Anchor locker is removed, the thimble eye is screwed onto the anchor rod ready for guying. No digging, no damage, no mess. A clean, simple and safe operation.

HYDRAULIC POWERED ANCHOR LOCKERS: THE DISTINCT ADVANTAGE OF THE MANTA RAY SYSTEM - INSTALLATION AND TESTING ARE SIMULTANEOUS
Manufactured from high grade metals, sections of the drive steel are coupled together so that the driving operation can be accomplished safely from ground level. Anchor locker pulls up on the anchor to set it in the ground at the desired holding capacity. Portable and lightweight, the anchor locker consists of a base plate and hydraulic ram. Desired holding capacity is measured by the gauge on the anchor locker.

MANTA RAY INSTALLATION METHODS (MECHANIZED)
Vehicle Mounted Breakers or Compactors: Boom mounted demolitions or compactions are very effective for driving Manta Ray and Stingray anchors. This method requires a special tool in the breaker or a socket welded to the bottom of the compactor to hold the drive steel. Skid Steer Loaders, Loader-Backhoes or Excavators work well. 4,000 to 16,000 lb. Vehicles with 250 to 500 foot-pound pavement breakers are best for Manta Rays, and 16,000 to 30,000 lb. Vehicles with 500 to 1,000 foot-pound pavement breakers are best for Stingrays. Breaker tools and vibro sockets are available from Foresight Products. Rock Drills: Top Hammer or down-the-hole hammer rock drills are very effective for installation of Manta Ray and Stingray anchors. For hard soil or weak rock installations, the drill can be used to drill a pilot hole. Foresight can provide striker bar adapters for these types of drills. Rock drilling steel can also be modified to drive Manta Rays and Stingrays

MANTA RAY ANCHOR DRIVER
The MANTA RAY Anchor Driver was developed by Foresight Products, Inc. for large-scale projects including 360 degree horizontal and vertical applications requiring high-speed, efficient and repetitive anchor installations.
The MANTA RAY Anchor Driver can be installed on a wide range of commonly available construction vehicles: from medium skid steers to large excavators and backhoes.

AT&T
Construction Work Drawing

PROPRIETARY INFORMATION
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State: TENNESSEE
District: MIDDLE TN
Exchange: DICKSON

AT&T Designer: Kenneth Kornegay
Phone: (615)848-2082
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Nextera Consultants, LLC
Phone: (615)708-7549
Ted Archie, Designer
Robert S. Stitcher, P.E.

ROBERT S. STITCHER
REGISTERED ENGINEER
DEPT. OF AGRICULTURE
No. 112313
STATE OF TENNESSEE

8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-2 OF U6-8

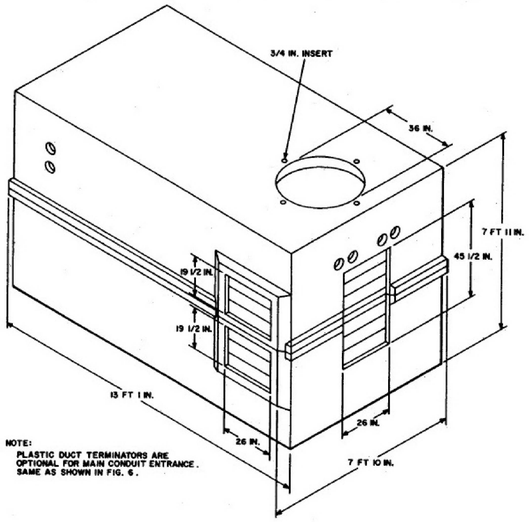
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

AT&T

SPECIFICATIONS

SCALE: N.T.S.

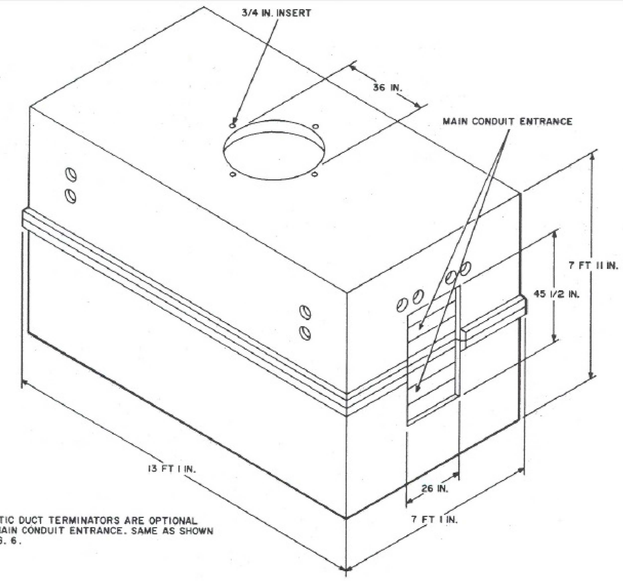
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	22004-3246-14	U6-3



NOTE:
PLASTIC DUCT TERMINATORS ARE OPTIONAL FOR MAIN CONDUIT ENTRANCE. SAME AS SHOWN IN FIG. 6.

38Y-4046-3 PRECAST MANHOLE

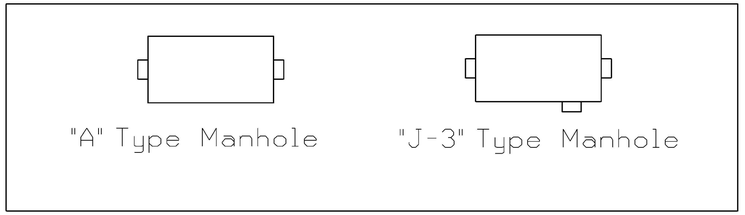
CONCRETE THICKNESS (INCHES)			INSIDE DIMENSIONS (FEET)			APPROXIMATE WEIGHT (POUNDS)	
WALLS	ROOF	FLOOR	LG	WIDE	HIGH	TOP SECTION	BASE SECTION
5	6	5	12	6	7	14,800	15,000



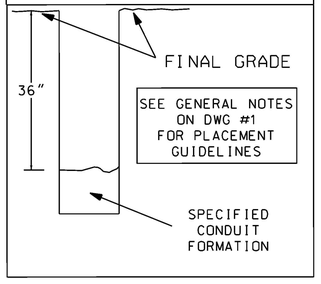
NOTE:
PLASTIC DUCT TERMINATORS ARE OPTIONAL FOR MAIN CONDUIT ENTRANCE. SAME AS SHOWN IN FIG. 6.

38Y-4046-1 PRECAST MANHOLE

CONCRETE THICKNESS (INCHES)			INSIDE DIMENSIONS (FEET)			APPROXIMATE WEIGHT (POUNDS)	
WALL	ROOF	FLOOR	LG	WIDE	HIGH	TOP SECTION	BASE SECTION
5	6	5	12	6	7	14,920	15,000



DETAIL--PLACE CONDUIT



All CONSTRUCTION SHALL COMPLY WITH AT&T DOCUMENTS ATT-TELCO-620-000-186 AND ATT-TELCO-002-600-374 (BOTH ATTACHED) FOR INSTALLATION OF MANHOLES AND CONDUIT FORMATIONS.

NOTE: DATA CONTAINED IN THESE DOCUMENTS ARE PROPRIETARY AND CANNOT BE SHARED WITH ANYONE OTHER THAN THOSE REQUIRED TO USE THE INFORMATION THEREIN TO CONSTRUCT THE FACILITIES PERTAINING TO THIS PROJECT REFERENCED IN THESE DOCUMENTS.

Manholes must comply with standards set forth in the attached ATT-TELCO-002-600-374, Section 4.

ROD AND MANDRILL ALL DUCTS AND PLACE MULE TAPE IN ALL DUCTS AFTER BACKFILLING AND BEFORE PLACING FINISHED SURFACE.

RODDING AND MANDRILLING, MULE TAPE PLACEMENT, SELECT BACFILL AND CONCRETE ENCASEMENT COST TO BE INCLUDED IN THE COST OF THE TRENCH.

NOTE: ALL DETAILS AND NOTES ON THIS SHEET PROVIDED BY AT&T FOR USE ON THIS PROJECT

AT&T
Construction Work Drawing

PROPRIETARY INFORMATION
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Exchange: DICKSON

AT&T Designer: Kenneth Kornegay
Phone: (615)848-2082
Consultant:
Nextera Consultants, LLC
Phone: (615)708-7549
Ted Archie, Designer
Robert S. Stitcher, P.E.

8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE STRUCTURE LAYOUT

DWG U6-3 OF U6-8

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

AT&T

SPECIFICATIONS

SCALE: N.T.S.

TYPE	YEAR	PROJECT NO.	SHEET NO.
Const.	2014	22004-3246-14	U6-4

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S5	635723.7001	1560845.8114	780.673	400+46.79	42.61	ALUM DISK
S6	636098.8606	1561134.8005	780.185	398+71.72	495.19	ALUM DISK
S7	635543.0891	1561622.2140	808.057	392+41.49	-37.73	ALUM DISK

D1
TOP-801.61
FULL OF DEBRIS;
PIPE SIZE, ORIGIN,
& DESTINATION UNK.

D2
TOP-800.95
FULL OF DEBRIS;
PIPE SIZE, ORIGIN,
& DESTINATION UNK.

D3
TOP-800.14
FULL OF DEBRIS;
PIPE SIZE, ORIGIN,
& DESTINATION UNK.

D4 TO D5
TOP-802.60
BOT-800.75
OUT-800.72
15"RCP

D5 TO D6
TOP-801.97
IN-799.97
BOT-797.95
OUT-RRECESSED
UNKNOWN.
15" (TAKEN
FROM PLAN)

D6 TO D10
TOP-799.05
BOT-796.02
INV-RECESSED
UNKNOWN.
IN-15", OUT-18"
(TAKEN FROM PLAN)

CURVE SR46#2-1
PI 99+92.28
N 635,662.5022
E 1,560,861.9843
PC 98+86.98
PT 100+96.44
∆ 14° 39′ 44″ (RT)
D 7° 00′ 00″
R 818.51
L 209.46
T 105.31
SE EXISTING
POSTED SPEED 40 MPH

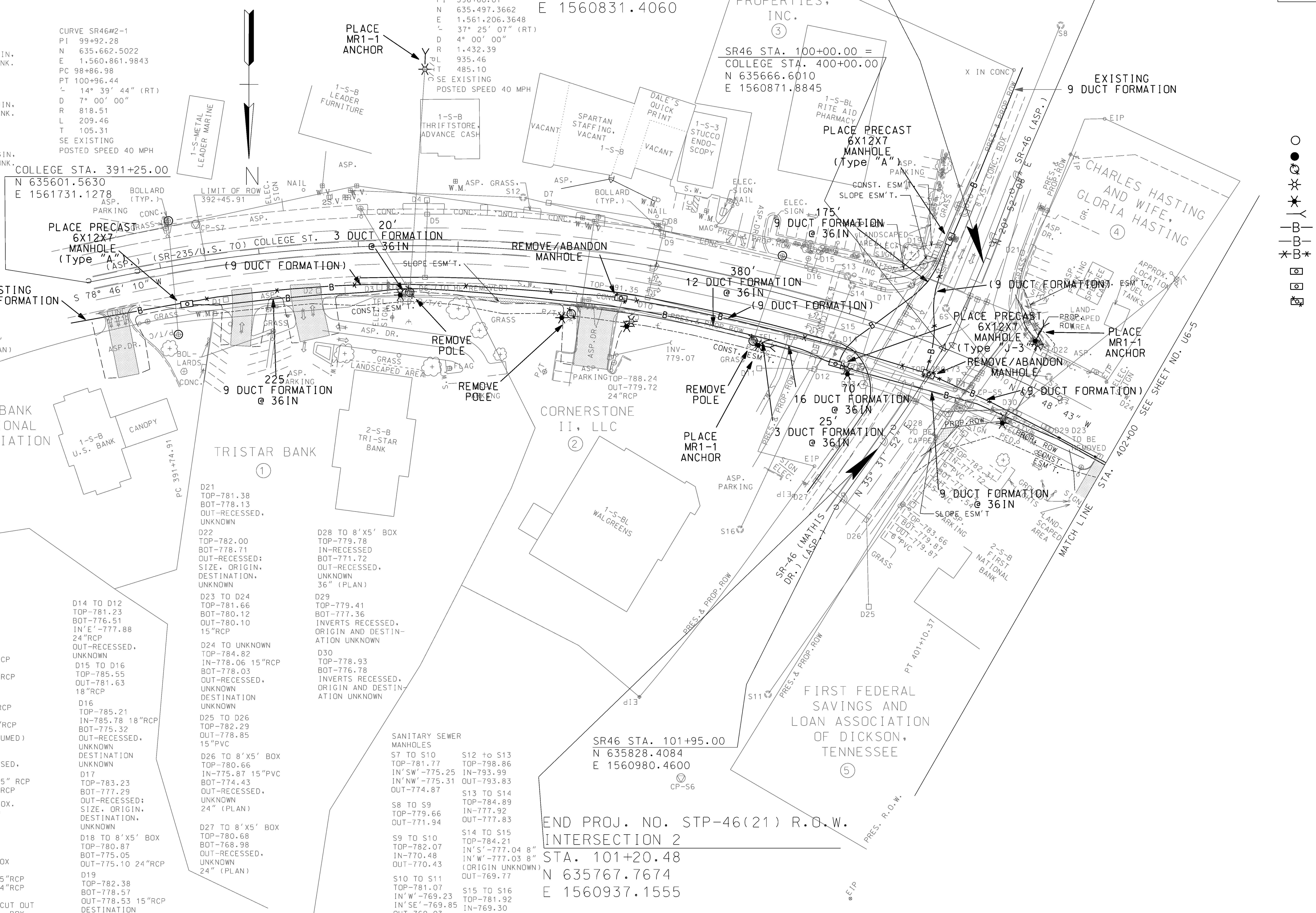
395
CURVE COLLEGE-1
PI 396+60.01
N 635,497.3662
E 1,561,206.3648
∆ 37° 25′ 07″ (RT)
D 4° 00′ 00″
R 1,432.39
L 935.46
T 485.10
SE EXISTING
POSTED SPEED 40 MPH

BEGIN PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 2
STA. 99+05.88
N 635581.6826
E 1560831.4060

SR46 STA. 98+30.00
N 635510.8638
E 1560804.1736

COLLEGE STA. 391+25.00
N 635601.5630
E 1561731.1278

SR46 STA. 100+00.00 =
COLLEGE STA. 400+00.00
N 635666.6010
E 1560871.8845



D7 TO D8
TOP-797.39
BOT-795.30
OUT-795.33
15"RCP

D8 TO D9
TOP-791.86
IN-789.81 15"RCP
BOT-789.72
OUT-789.61 15"RCP

D9 TO D10
TOP-792.26
IN-788.97 15"RCP
BOT-788.79
OUT-788.74 15"RCP

D10 TO D14(ASSUMED)
TOP-789.41
BOT-785.16
IN'E'-18"RECESSED,
UNKNOWN
IN'S'-785.25 15" RCP
OUT-784.87 24"RCP

D11 TO CONC. BOX.
DETENTION POND
OVERFLOW
STRUCTURE
TOP-779.00
OUT-776.94

D12 TO CONC. BOX
TOP-778.68
IN'W'-775.28 15"RCP
IN'S'-771.29 24"RCP
BOT-771.39
OUT'E'-771.31 CUT OUT
HOLE INTO CONC. BOX

D13 TO D12
TOP-780.11
BOT-777.80
OUT-RECESSED,
UNKNOWN

D14 TO D12
TOP-781.23
BOT-776.51
IN'E'-777.88
24"RCP
OUT-RECESSED,
UNKNOWN

D15 TO D16
TOP-785.55
OUT-781.63
18"RCP

D16
TOP-785.21
IN-785.78 18"RCP
BOT-775.32
OUT-RECESSED,
UNKNOWN
DESTINATION
UNKNOWN

D17
TOP-783.23
BOT-777.29
OUT-RECESSED;
SIZE, ORIGIN,
DESTINATION,
UNKNOWN

D18 TO 8'X5' BOX
TOP-780.87
BOT-775.05
OUT-775.10 24"RCP

D19
TOP-782.38
BOT-778.57
OUT-778.53 15"RCP
DESTINATION
UNKNOWN

D20 TO 8'X5' BOX
TOP-780.38
BOT-777.20
OUT-24"RCP

D21
TOP-781.38
BOT-778.13
OUT-RECESSED,
UNKNOWN

D22
TOP-782.00
BOT-778.71
OUT-RECESSED;
SIZE, ORIGIN,
DESTINATION,
UNKNOWN

D23 TO D24
TOP-781.66
BOT-780.12
OUT-780.10
15"RCP

D24 TO UNKNOWN
TOP-784.82
IN-778.06 15"RCP
BOT-778.03
OUT-RECESSED,
UNKNOWN
DESTINATION
UNKNOWN

D25 TO D26
TOP-782.29
OUT-778.85
15"PVC

D26 TO 8'X5' BOX
TOP-780.66
IN-775.87 15"PVC
BOT-774.43
OUT-RECESSED,
UNKNOWN
24" (PLAN)

D27 TO 8'X5' BOX
TOP-780.68
BOT-768.98
OUT-RECESSED,
UNKNOWN
24" (PLAN)

D28 TO 8'X5' BOX
TOP-779.78
IN-RECESSED
BOT-771.72
OUT-RECESSED,
UNKNOWN
36" (PLAN)

D29
TOP-779.41
BOT-777.36
INVERTS RECESSED,
ORIGIN AND DESTIN-
ATION UNKNOWN

D30
TOP-778.93
BOT-776.78
INVERTS RECESSED,
ORIGIN AND DESTIN-
ATION UNKNOWN

SANITARY SEWER
MANHOLES

S7 TO S10
TOP-781.77
IN'SW'-775.25
IN'NW'-775.31
OUT-774.87

S8 TO S9
TOP-779.66
OUT-771.94

S9 TO S10
TOP-782.07
IN-770.48
OUT-770.43

S10 TO S11
TOP-781.07
IN'W'-769.23
IN'SE'-769.85
OUT-769.03

S11
TOP-782.83
IN-759.16

S12 to S13
TOP-798.86
IN-793.99
OUT-793.83

S13 TO S14
TOP-784.89
IN-777.92
OUT-777.83

S14 TO S15
TOP-784.21
IN'S'-777.04 8"
IN'W'-777.03 8"
(ORIGIN UNKNOWN)
OUT-769.77

S15 TO S16
TOP-781.92
IN-769.30
OUT-769.23

S16
TOP-783.73
IN-768.02

SR46 STA. 101+95.00
N 635828.4084
E 1560980.4600

END PROJ. NO. STP-46(21) R.O.W.
INTERSECTION 2
STA. 101+20.48
N 635767.7674
E 1560937.1555

LEGEND

- EXISTING TELEPHONE POLE
- PROPOSED TELEPHONE POLE
- REMOVED TELEPHONE POLE
- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ANCHOR
- —B— PROPOSED CONDUIT
- —B— EXISTING CONDUIT
- ✕B✕ ABANDONED CONDUIT
- PROPOSED MANHOLE
- EXISTING MANHOLE
- REMOVED/ABANDONED MANHOLE

AT&T
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8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-4 OF U6-8

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO. 2
STA.391+25 TO STA.402+00
SCALE: 1"= 50'

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
Const.	2014	22004-3246-14	U6-5
.	.	.	.
.	.	.	.
.	.	.	.

SANITARY SEWER MANHOLES

S1 TO S2
TOP-810.81
OUT-804.75

S2 TO S3
TOP-807.79
IN-803.48
OUT-803.48

S3 TO S5
TOP-807.47
IN'NW'-802.02
IN'NE'-802.06
OUT-801.99

S4 TO S5
TOP-802.01
OUT-796.89

S5 TO S7
TOP-794.44
IN'NW'-790.24
IN'NE'-790.34
OUT-790.19

S6 TO S7
TOP-785.41
OUT-776.61

D31 TO D35
TOP-793.45
OUT-791.40
15"RCP

D32 TO D35
TOP-794.97
OUT-790.09
24"RCP

D33 TO D35
TOP-794.34
OUT-788.92
18"RCP

D34 TO D35
TOP-793.92
OUT-791.02
15"RCP

D35
JUNCTION BOX
NOT FOUND
APPROXIMATE
LOCATION SHOWN
DESTINATION
UNKNOWN

D36 TO D41
TOP-807.45
OUT-804.99
18"RCP

D37 TO D41
TOP-808.44
OUT-805.32
15"RCP

D38 TO D41
TOP-808.35
OUT-805.60
15"RCP

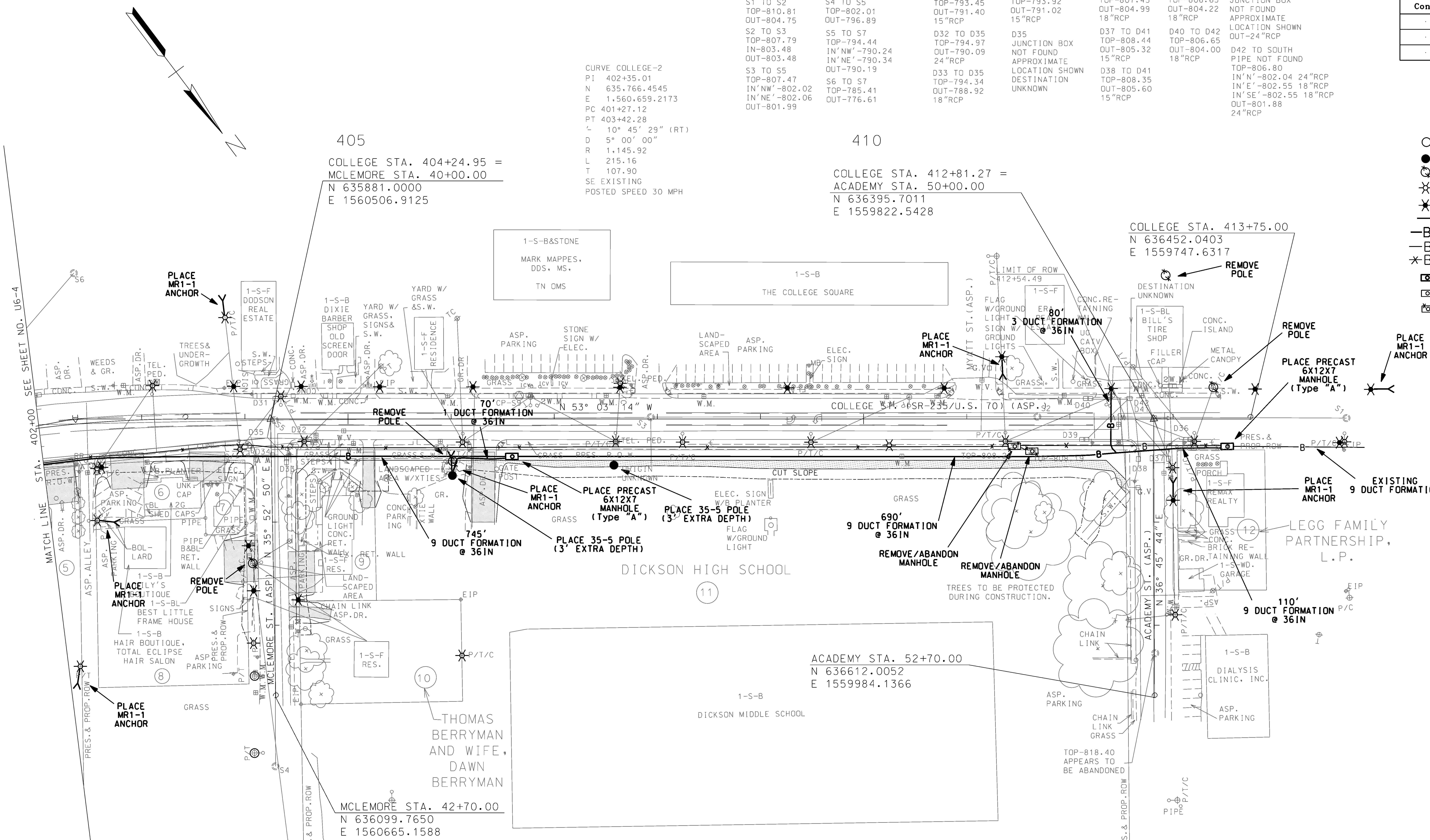
D39 TO D42
TOP-806.65
OUT-804.22
18"RCP

D40 TO D42
TOP-806.65
OUT-804.00
18"RCP

D41 TO D42
JUNCTION BOX
NOT FOUND
APPROXIMATE
LOCATION SHOWN
OUT-24"RCP

D42 TO SOUTH
PIPE NOT FOUND
TOP-806.80
IN'N'-802.04 24"RCP
IN'E'-802.55 18"RCP
IN'SE'-802.55 18"RCP
OUT-801.88
24"RCP

CURVE COLLEGE-2
PI 402+35.01
N 635,766.4545
E 1,560,659.2173
PC 401+27.12
PT 403+42.28
Δ 10° 45' 29" (RT)
D 5° 00' 00"
R 1,145.92
L 215.16
T 107.90
SE EXISTING
POSTED SPEED 30 MPH



6 CHIANG LEE AND WIFE, WONG NG MOI

7 MELANIE LOUISE RATLIFF

8 RALPH SULLIVAN AND WIFE, LAURA SULLIVAN

9 LAWRENCE E. RAMSEY AND WIFE, DANA GAY RAMSEY

NOTE: THE OWNER OF TRACT 7 IS UNSURE WHAT THE "CAPS" ARE ON PROPERTY. SHE SAID IT MIGHT BE UG PROPANE TANKS. SHE DOES NOT KNOW IF PROPERTY USED TO BE A GAS STATION.

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET	DESCRIPTION
S9	636007.8382	1560300.7486	805.064	406+65.95	-22.55	ALUM DISK

LEGEND

- EXISTING TELEPHONE POLE
- PROPOSED TELEPHONE POLE
- REMOVED TELEPHONE POLE
- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ANCHOR
- —B— PROPOSED CONDUIT
- —B— EXISTING CONDUIT
- ✱B✱ ABANDONED CONDUIT
- PROPOSED MANHOLE
- EXISTING MANHOLE
- REMOVED/ABANDONED MANHOLE

AT&T

Construction Work Drawing

PROPRIETARY INFORMATION
Not for disclosure outside AT&T or any of its subsidiaries except under written agreement

State: TENNESSEE
District: MIDDLE TN
Exchange: DICKSON

AT&T Designer: Kenneth Kornegay
Phone: (615)848-2082
Consultant:
Nextera Consultants, LLC
Phone: (615)708-7549
Ted Archie, Designer
Robert S. Stitcher, P.E.

ROBERT S. STITCHER REGISTERED ENGINEER AGRICULTURE COMMERCE No. 112313 STATE OF TENNESSEE

8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-5 OF U6-8

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO. 2
STA. 402+00 TO STA. 413+00

SCALE: 1"= 50'

$$$$SYTIME$$$$$
$$$$DGNSPEC$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
Const.	2014	22004-3246-14	U6-6
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.	.	.	.
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STORM DRAINAGE STRUCTURES

D1
TOP-851.57
OUT-849.08
15"RCP

D2
TOP-851.27
IN-848.07
15"RCP
BOT-847.62
OUT-847.53
18"RCP

D3 (TO BE REMOVED)
TOP-854.97
IN-'SW'-844.66
18"RCP
IN'NW'-851.17
18"RCP
BOT-840.77
OUT-840.76
18"RCP

D4
INV-852.34
8"PVC W/
STONE EW

D5
INV-851.18
18"RCP
W/CONC. EW

D6
INV-854.22
W/CONC. EW

D9
INV-859.25
W/CONC. EW

D10
TOP-854.35
OUT-840.54
18"RCP

D11
TOP-863.19
OUT-859.88
18"RCP

D12
INV-875.83
18"CMP

D13
INV-872.76
18"CPP

D14
INV-869.54

D15
INV-867.57

D16
INV-868.79

D17
NOT FOUND
APPROX.
LOC. SHOWN

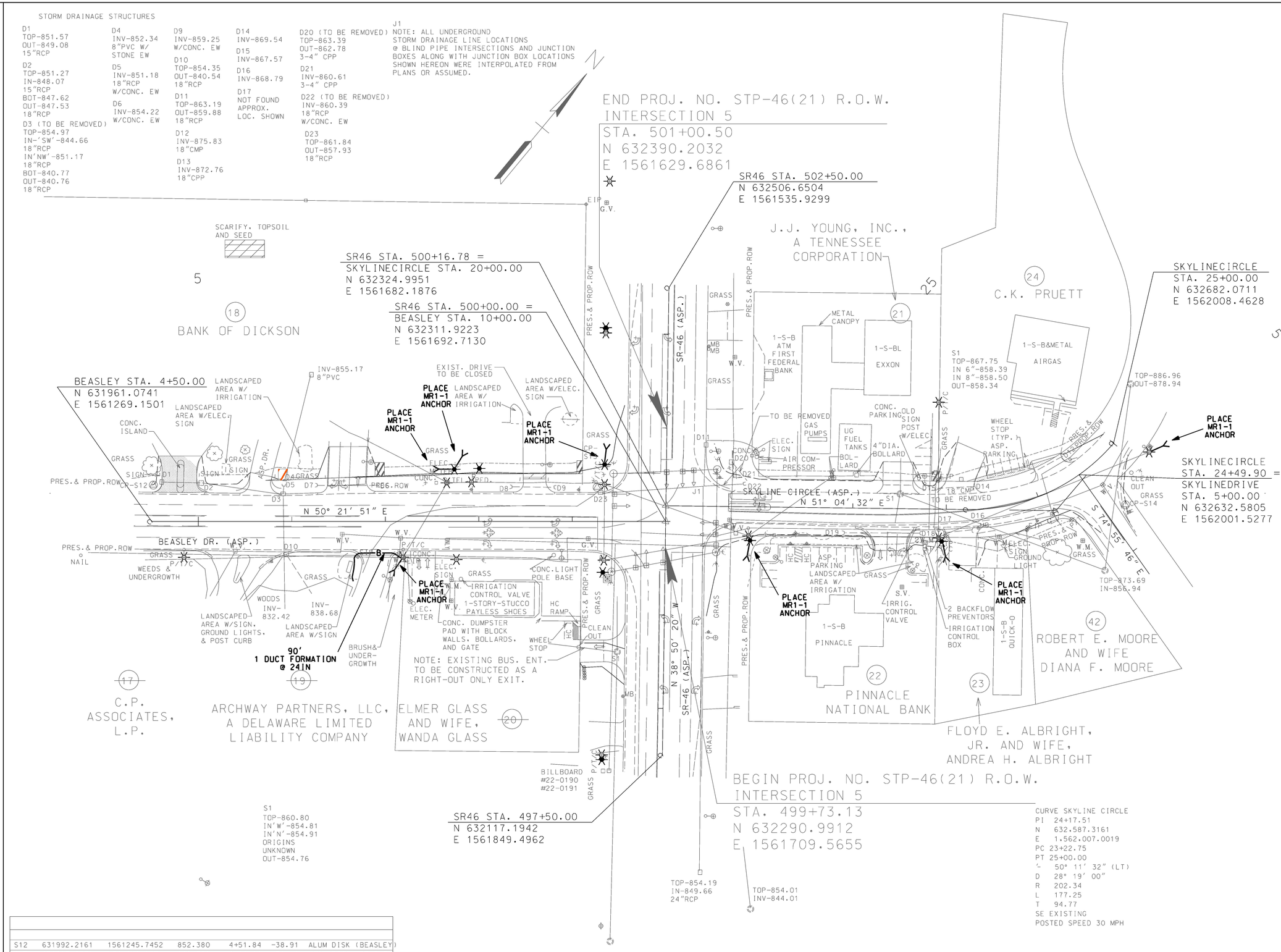
D20 (TO BE REMOVED)
TOP-863.39
OUT-862.78
3-4" CPP

D21
INV-860.61
3-4" CPP

D22 (TO BE REMOVED)
INV-860.39
18"RCP
W/CONC. EW

D23
TOP-861.84
OUT-857.93
18"RCP

J1
NOTE: ALL UNDERGROUND
STORM DRAINAGE LINE LOCATIONS
@ BLIND PIPE INTERSECTIONS AND JUNCTION
BOXES ALONG WITH JUNCTION BOX LOCATIONS
SHOWN HEREON WERE INTERPOLATED FROM
PLANS OR ASSUMED.



LEGEND

- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ANCHOR
- —B— PROPOSED CONDUIT

S12	631992.2161	1561245.7452	852.380	4+51.84	-38.91	ALUM DISK (BEASLEY)
S13	632293.2359	1561612.9534	862.598	9+26.66	-36.49	ALUM DISK (BEASLEY)
S14	632639.4348	1562060.2400	878.627	24+67.07	55.84	ALUM DISK (SKYLINE)

CURVE SKYLINE CIRCLE
PI 24+17.51
N 632.587.3161
E 1.562.007.0019
PC 23+22.75
PT 25+00.00
Δ 50° 11' 32" (LT)
D 28° 19' 00"
R 202.34
L 177.25
T 94.77
SE EXISTING
POSTED SPEED 30 MPH

AT&T
Construction Work Drawing

PROPRIETARY INFORMATION
Not for disclosure outside AT&T or any of its subsidiaries except under written agreement

State: TENNESSEE
District: MIDDLE TN
Exchange: DICKSON

AT&T Designer: Kenneth Kornegay
Phone: (615)848-2082
Consultant:
Nextera Consultants, LLC
Phone: (615)708-7549
Ted Archie, Designer
Robert S. Stitcher, P.E.

ROBERT S. STITCHER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 112311
STATE OF TENNESSEE

8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-6 OF U6-8

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.5

SCALE: 1"= 50'

$$$$SYTIME$$$$$$$
$$$$DGNSPEC$$$$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
Const.	2014	22004-3246-14	U6-7
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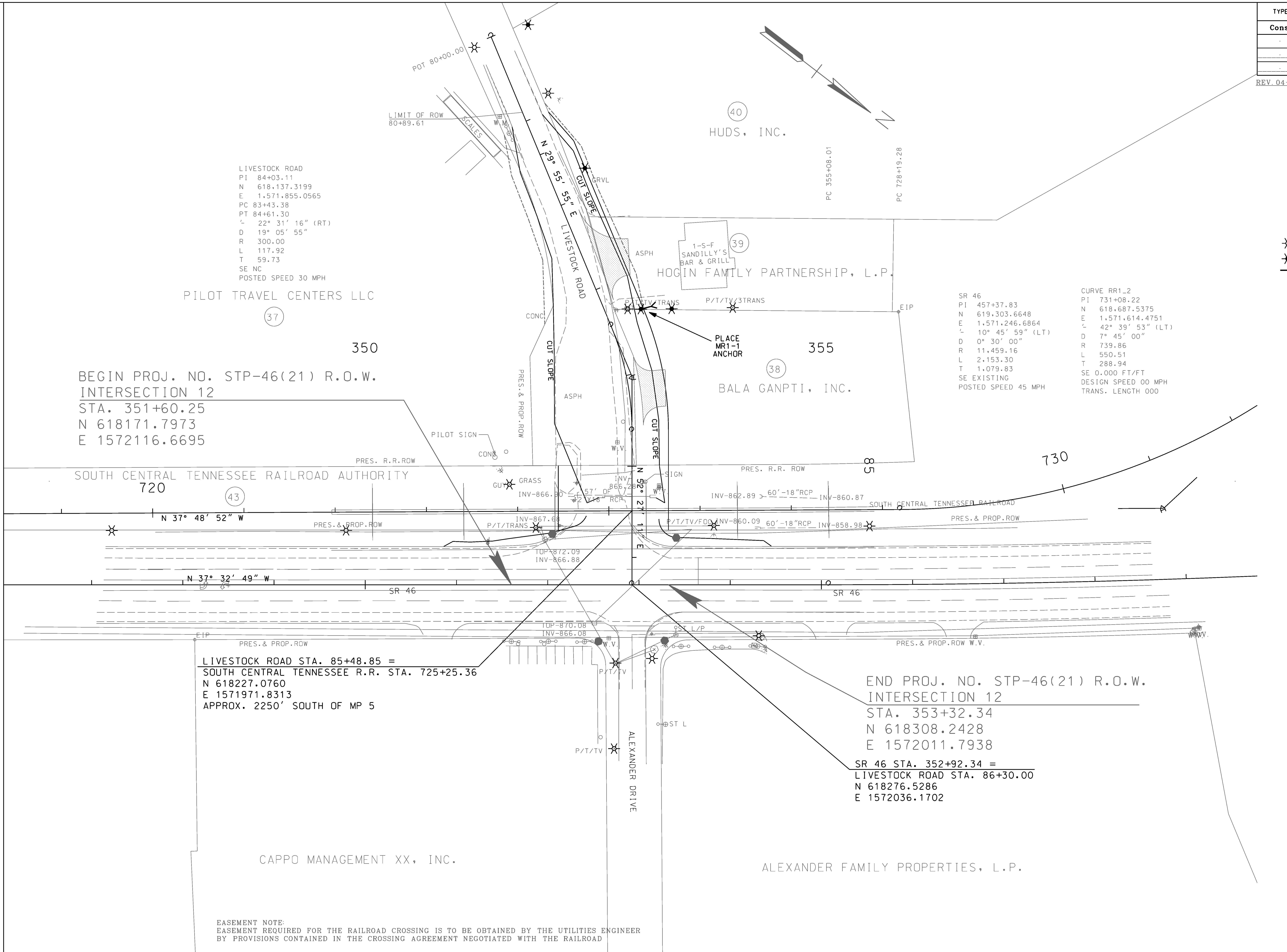
REV. 04-30-14: ADDED BUILDING TO TRACT NO.



LEGEND

- EXISTING POWER POLE
- PROPOSED POWER POLE
- PROPOSED ANCHOR

EASEMENT NOTE:
EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD

AT&T
Construction Work Drawing

PROPRIETARY INFORMATION
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State: TENNESSEE
District: MIDDLE TN
Exchange: DICKSON

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ROBERT S. STITCHER REGISTERED ENGINEER AGRICULTURE COMMERCE No. 112313 STATE OF TENNESSEE

8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-7 OF U6-8

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

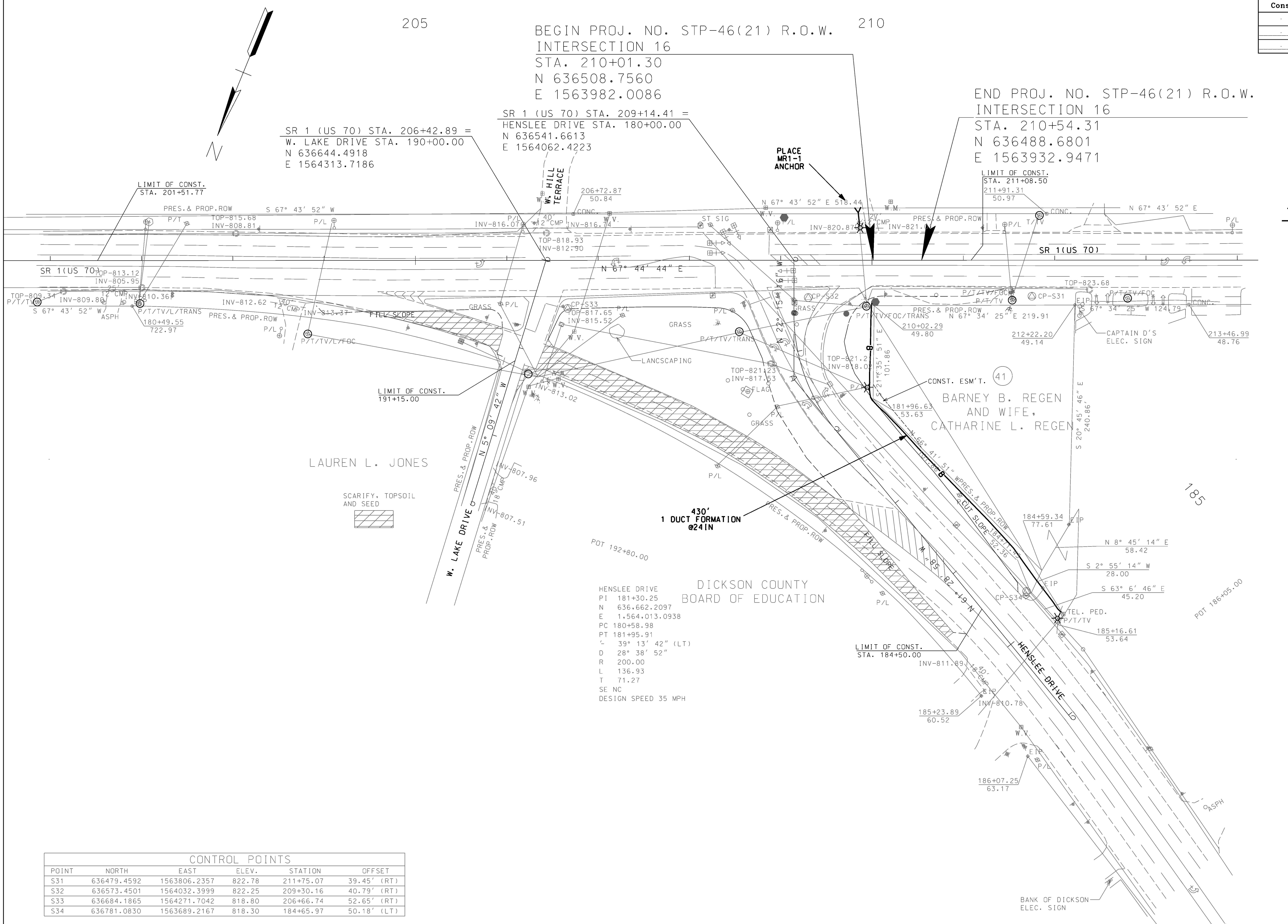
PRESENT LAYOUT

INTERSECTION NO. 12

SCALE: 1"=50'

$$$$SYTIME$$$$$
$$$$DGNSPEC$$$$

TYPE	YEAR	PROJECT NO.	SHEET NO.
Const.	2014	22004-3246-14	U6-8



CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S31	636479.4592	1563806.2357	822.78	211+75.07	39.45′ (RT)
S32	636573.4501	1564032.3999	822.25	209+30.16	40.79′ (RT)
S33	636684.1865	1564271.7042	818.80	206+66.74	52.65′ (RT)
S34	636781.0830	1563689.2167	818.30	184+65.97	50.18′ (LT)

AT&T
Construction Work Drawing

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ROBERT S. STITCHER REGISTERED ENGINEER AGRICULTURE COMMERCE No. 112313 STATE OF TENNESSEE

8/20/2014

Job Description:
TDOT Proj.# 22004-3246-14
PROPOSED TELEPHONE
STRUCTURE LAYOUT

DWG U6-8 OF U6-8

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000083 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

INTERSECTION NO.16

SCALE: 1″=50′

$$$$SYTIME$$$$$
$$$$DGNSPEC$$